

BUSINESS WEEK

DEC. 7, 1946



Edward Hopkins, Jr. — Investment bankers' choice for a year that will need watching (page 8)

BUSINESS
WEEK
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Is a Profit right or wrong?

★

THE communists want you to believe that a corporation which makes a profit is doing wrong.

If a farmer plants 1 potato and harvests 20, is that wrong? (You—and the communists—wouldn't eat, if he didn't.)

Without modern potato-raising machinery, the farmer would get only 6 or 7 potatoes from his 1. That would mean more farm jobs to raise the nation's potato crop . . . or would it? No—potatoes would be so expensive, few could afford them, and they would provide few jobs.

With modern machinery, the farmer gets 20 for 1, and you and I can afford potatoes. Is that wrong?

But some of the 20 have to go to pay for the machinery. Some go to the farmer for his labor. Some

go to pay for keeping the machinery in repair. Some go to build up a fund to provide new machinery when the old is worn out. One or two go to the farmer as profit. And if he doesn't get that 1 or 2, he will stop raising potatoes, there will be a shortage and high prices, and we all suffer.

It is exactly the same in every factory.

Samuel Gompers, the labor leader, understood that when he said, "The worst crime against working people is a company which fails to operate at a profit."

Workmen would be better off if more of the present-day labor leaders studied Gompers and farming, instead of communism and Karl Marx.



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Koroseal flexible synthetic is now

being made into shower curtains and raincoats (won't stick even if folded up wet), upholstery (just wash it with soap and water), baby pants (soft, easy to wash), garden hose (leave it out in the sun if you like), tank linings and scores of other articles for home and industry. Every one that is genuine carries the Koroseal name on the label. It's your guarantee of Koroseal value. The B.F. Goodrich Co., Akron, Ohio.

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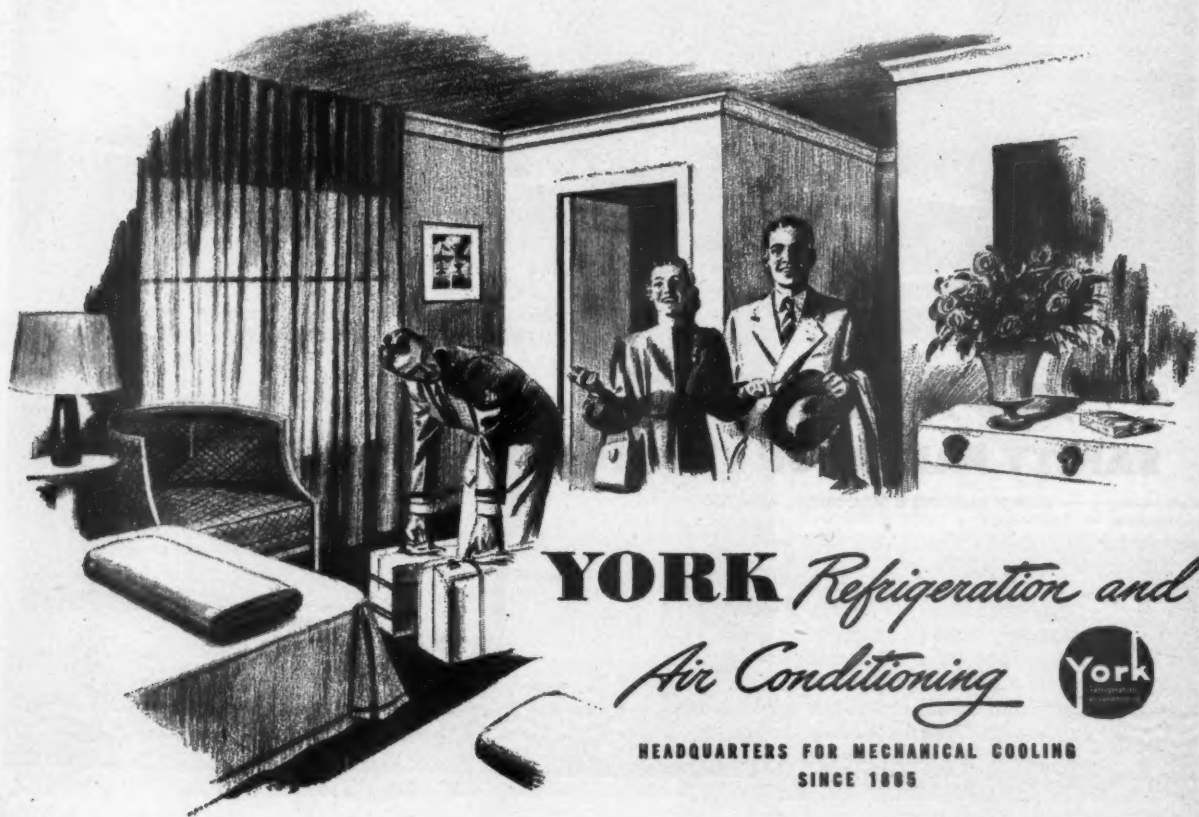
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WASHINGTON BULLETIN

RIGHT HOOK HITS LABOR—

President Truman has finally made up his mind to construe the election returns as a mandate to turn right, follow in the footsteps of the Republicans. Stung by John L. Lewis' defiance (page 15), Truman has accepted the views of his conservative advisers (BW—Nov. 23'46,p5), rejected Hannegan's urging that he bear '48 in mind and try to fight off Republican labor legislation.

To say that, by moving right, Truman can get the jump on the Republicans is of course superficial. His move simply makes it politically easier for the Republicans to shift even farther right themselves.

In his new mood, Truman's recommendations on Wagner Act revision will carry him just about as far as cooler Republican leaders had intended to go next session (BW—Nov.16'46,p5)—that is, about as far as last session's vetoed Case bill. It provided for cooling off periods and mediation, banned secondary boycotts, penalized violations of labor contracts, denied Wagner Act rights to foremen.

But now that Truman has shifted ground, some Republicans are talking of banning the closed shop, of antitrust action against unions, and even of compulsory arbitration in vital industries.

—AND HOUSING REVOLUTION

Though Lewis provided the final impetus to Truman's abandonment of any vestige of New Dealing, the policy decision is not limited to labor questions, as is evidenced by this week's abandonment of housing as an enterprise calling for major government stimulation. The recent gutting of the OPA was merely a matter of taking an inevitable move a few months early, but now the Administration has dropped one of its key programs.

Wilson Wyatt's resignation over the issue of RFC financing for factory-built housing means the end of this effort to use government funds to telescope into about 18 months a revolution in the low-cost house business which may now probably extend over a decade (BW—Nov.9'46,p7). Some companies like Consolidated Vultee have been holding back for the past several weeks on finally committing themselves to house manufacture, waiting to see whether they could count on whole-hearted government backing. They know now that they can't.

Wyatt's still-untried scheme for RFC second mortgages on multiple-dwelling rental units—which would have per-

mitted builders to go ahead without putting up any money—dies aborning.

His resignation means the end of RFC financing on a nonbusinesslike basis. This has been the heart of the industrialized and rental programs; they are dead regardless of what actions to continue them nominally may be taken.

Builders of conventional houses, at present completing some 60,000 permanent homes a month, will soon be free to adventure into the juicy market for houses costing more than \$10,000. Without effective priority aid, they may find that commercial and industrial use of building materials reduces the total of houses they can build, but their headaches may well be fewer and their profits greater.

POLITICAL FOOTBALL

Agriculture is the last big reconversion job. This week the Secretary of Agriculture threw it right into the lap

of the incoming Republican Congress.

Best guess is that the Republicans will throw it right back to the Democratic Administration. They may well figure that it's smart to make the Democrats handle this tough one before the White House changes hands in '48.

But if the Republican leaders plump for courage instead of caution, the handling of the reconversion price supports guaranteed to farmers by the wartime Steagall amendment will give them a chance to engineer a transition from the Henry Wallace philosophy to their own version of a long-term program for agriculture.

Price Support Pattern

The immediate issue is spuds. In asking Congress for instructions on handling price supports for over-produced potatoes (BW—Oct.5'46,p5), Secretary of Agriculture Clinton P. Anderson raised the whole question of farm policy.

Crux of the problem is the interpre-

Republican Businessman Gets Commerce Post

With the appointment of William Chapman Foster, Long Island City manufacturer, as Under Secretary of Commerce, a Republican has made the "little cabinet." He succeeds Alfred Schindler, who felt aggrieved by the puncture of his confident expectation that he'd succeed Wallace as secretary.

• Foster is president of a small business (it had some 300 employees during the war), the Pressed & Welded Steel Products Co. During the war he held a string of procurement jobs in the War Dept. He was No. 2 man in setting up the Army's smooth contract-settlement procedures, and later was head of the Contract Settlement Board. At the war's end he was director of purchases for the Army Service Forces.

On at least two previous occasions it was only Foster's politics that eliminated him from consideration for important jobs representing small business in government. One was the chairmanship of the Smaller War Plants Corp., which went to Maury Maverick in January, 1944. Foster was also on Commerce Secretary Wallace's slate early this year for head of the Office of Small Business, a job which would have become an assistant secretaryship if

Congress had consented to the plan.

• Foster has been active in the Committee for Economic Development, as chairman of the subcommittee on small business of C.E.D.'s Research & Policy Committee.



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the probability that the lines will permanently go for gas (BW—Nov. 23 '46, p7), if only by default. The gas shortage in the Ohio area has little to do with the coal strike, and there's no reason to think it will have disappeared when the four months are up.

THE COVER

For a year that will need watching, the Investment Bankers Assn., convened at Palm Beach, Fla., this week, has picked a president who can be counted on.

Philadelphia has counted on Edward Hopkinson, Jr., for a long time. For more than two decades his name has been linked with virtually every important business, civic, and financial development in the city.

● "Mr. Philadelphia"—He has never been a candidate for public office. Nor has he ever been just a name on a civic organization letterhead. He has worked hard as a citizen on community jobs that run all the way from straightening out the famous financial muddle of the local transit system to engineering the Quaker City bid for the United Nations.

If U.N.'s homeseekers are looking for a "Mr. Philadelphia" to do business with, Hopkinson can well answer to the name.

As an undergraduate at the University of Pennsylvania, Hopkinson captained the swimming team, set an A.A.U. mile-swim record, edited the Daily Pennsylvanian, and was president of the class of 1907. Later he became the university's youngest alumnus-trustee.

● Active in City Planning—After graduation from Penn's law school, he practiced law until 1926 when he became a partner in the investment banking house of Drexel & Co., at that time a Morgan affiliate. Edward T. Stotesbury's death in 1938 brought him to the senior partnership. To this job he adds a long list of directorships, besides heading the City Planning Commission and the executive committee of the Chamber of Commerce.

A direct descendant of Francis Hopkinson, signer of the Declaration of Independence, the I.B.A.'s new 61-year-old president is an Episcopalian, a Republican, a fisherman, a six-footer plus. He is married, has seven children, and lives outside Philadelphia in Montgomery County—an obstacle that has tripped up at least one burgeoning boom to make him "Mr. Mayor."

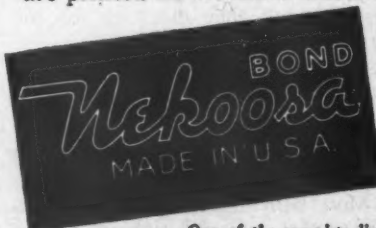
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BUSINESS WEEK • Dec. 7, 1946

THE OUTLOOK

BUSINESS WEEK

DECEMBER 7, 1946



Coal conservation was pressed this week to the point where industrial paralysis appeared to be just over the horizon (page 15).

Companies that are operating hand-to-mouth on parts or materials can't go on for long with new shipments of these items embargoed. Then, too, most manufacturers of finished goods have to ship their output or stop producing; they have little space for storing their end products.

Even a plant that has fuel may have to shut down as things stand.

If you have coal on hand, you can't be too sure it won't be taken away from you.

If you haven't any, you can't be too sure of getting some from somebody else. Your operation, for one thing, may not be deemed essential. Besides, the other fellow's coal may not be of a size for you to burn.

Movement of coal from frozen stocks to areas where supplies are desperately needed won't be easy in the present transport crisis.

Steel, for all its dependence on coal, could skimp along better than many manufacturing lines—barring an out-and-out shutdown order.

Operations have been slashed one-third. That stretches coal piles proportionately. The industry, as a whole, probably could struggle along at 50% to 60% of capacity for three or four more weeks.

Last spring, with a million tons on hand when the coal strike started, steel mills scraped by for a month before the deep cuts came.

This time, with 850,000 tons of coal the industry has moved faster. It cut from 91% to 60% of capacity within two weeks. This helps conserve not only coal but scarce scrap as well.

Storage of finished steel, if the stuff can't be moved by rail, will pose something of a problem, needless to say. The average steel mill, however, has a lot more covered space for stacking sheets than a refrigerator plant has for storing finished units.

Steel, thus, can be made as long as the mills have (1) coal and (2) storage space. The mills might even be able to catch up ever so slightly on orders if most of their big customers are closed.

Freight priorities will clamp down particularly hard on auto companies' shipments to assembly plants, quite aside from the direct effect on the home factory.

The main plant, after all, relies very largely on truck haul-aways to get finished units out of the shop and into showrooms.

Ramifications of the whole labor situation—strikes present and in prospect—tend to prevent a resumption of the business upturn.

However, Christmas trade isn't likely to be greatly affected by present reductions in wage payments through strikes and layoffs.

In the 1919 holiday season, we had strikes in steel and coal simultaneously. Yet go back to the records of that earlier day and you will read of booming holiday trade with prices spinning upward.

To be sure, labor leaders couldn't close all the coal mines or all the steel mills in 1919. They hadn't the organizations. But they closed a large share

THE OUTLOOK (Continued)

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of both and buying during that holiday season continued to go roaring on.

•
The general price level won't face any severe test until after the turn of the year. It may even be a matter of months before we have any conclusive evidence of a leveling off or of a downturn. Developments of the next two or three months are sure to be confusing.

For example, if we have strikes in steel and autos, the immediate affects will be deflationary. Industry's expenditures will be slowed.

•
But if substantial wage increases should be won, the spending spree will be on again.

Meanwhile, we shall have lost additional production which could have gone a long way toward absorbing consumers' dollars.

These cross-currents won't help purchasing agents set buying policy nor will they help sales managers lay out selling bogeys.

•
Cotton prices have had the sharpest shakedown of any of our major industrial commodities. Most observers agree that the earlier tops near 40¢ a pound were preposterous. Yet cotton may not stay down.

October use in this country broke all peacetime records. The month's consumption was at an annual rate of more than 11,000,000 bales.

Consuming establishments had on hand just over 2,000,000 bales at the end of October, barely 100,000 more than a year ago. But here's the catch: Stocks in public storage and at compresses were only 5,900,000 bales, down nearly 4,000,000 bales from a year earlier.

If cotton textile activity continues at present levels, visible supplies will begin to get pretty short by next spring and summer.

The export program, of course, is at the bottom of this tightness.

Perhaps, however, textile supply shortly may catch up with demand. Then, too, any cut in purchasing power would pare down the demand.

•
Prospects that many types of consumers' goods would catch up with demand had continued bright until the last few days.

Output of nondurable manufactures, in fact, had hit a postwar high in October, according to the Federal Reserve Board. Volume was more than 10% of the 1941 peak and 70 above the 1935-39 average.

Durable goods producers likewise reached a postwar peak, a little better than double the 1935-39 average.

Further gains probably would have been chalked up in November but for the disruption caused by the coal strike late last month.

•
Construction prospects are materially altered as a result of Wilson Wyatt's resignation as Housing Administrator (page 5).

Obviously the big prefabricated housing program has been scuttled and it is likely that the limit on unit costs is on the way up—or out.

But, for business, there is another important significance. Contract awards for homes already are on the way down, having declined 20% in October. Weather is against a recovery before next spring. Hence restrictions on business building should be eased to take up the slack.

Awards for factory construction, as a matter of fact, have been making a relatively better showing than housing for several weeks.



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FIGURES OF THE WEEK

THE INDEX (see chart below).

PRODUCTION

	\$ Latest Week	Preceding Week	Month Ago	Year Ago	1941 Average
Steel ingot operations (% of capacity).....	60.2	62.8	91.1	82.8	97.3
Production of automobiles and trucks.....	72,692	196,461	95,427	13,140	98,236
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands)....	\$14,272	\$12,538	\$14,163	\$11,410	\$19,433
Electric power output (million kilowatt-hours).....	4,448	4,765	4,628	4,043	3,130
Crude oil (daily average, 1,000 bbls.).....	4,795	4,810	4,759	4,448	3,842
Bituminous coal (daily average, 1,000 tons).....	1,067	12,218	2,083	2,068	1,685

TRADE

Miscellaneous and L.C.L. carloadings (daily average, 1,000 cars).....	90	88	91	78	86
All other carloadings (daily average, 1,000 cars).....	45	65	66	54	52
Money in circulation (Wednesday series, millions).....	\$28,815	\$28,689	\$28,588	\$28,169	\$9,613
Department store sales (change from same week of preceding year).....	+41%	+24%	+23%	+9%	+17%
Business failures (Dun & Bradstreet, number).....	24	24	22	15	228

PRICES (Average for the week)

Spot commodity index (Moody's, Dec. 31, 1931=100).....	375.2	1374.3	356.2	264.3	198.1
Industrial raw materials (U. S. Bureau of Labor Statistics, Aug., 1939=100)...	257.9	1255.9	216.1	169.6	138.5
Domestic farm products (U. S. Bureau of Labor Statistics, Aug., 1939=100)...	312.1	1314.7	303.3	231.6	146.6
Finished steel composite (Steel, ton).....	\$64.45	\$64.45	\$64.45	\$58.27	\$56.73
Scrap steel composite (Iron Age, ton).....	\$25.00	\$25.00	\$19.17	\$19.17	\$19.48
Copper (electrolytic, Connecticut Valley, lb.).....	19.500¢	119.371¢	14.375¢	12.000¢	12.022¢
Wheat (Kansas City, bu.).....	\$2.12	\$2.16	\$2.07	\$1.69	\$0.99
†Sugar (raw, delivered New York, lb.).....	5.57¢	5.57¢	5.57¢	3.75¢	3.38¢
Cotton (middling, ten designated markets, lb.).....	30.96¢	130.74¢	31.14¢	24.30¢	13.94¢
Wool tops (New York, lb.).....	\$1.618	\$1.623	\$1.330	\$1.330	\$1.281
Rubber (ribbed smoked sheets, New York, lb.).....	22.50¢	22.50¢	22.50¢	22.50¢	22.16¢

FINANCE

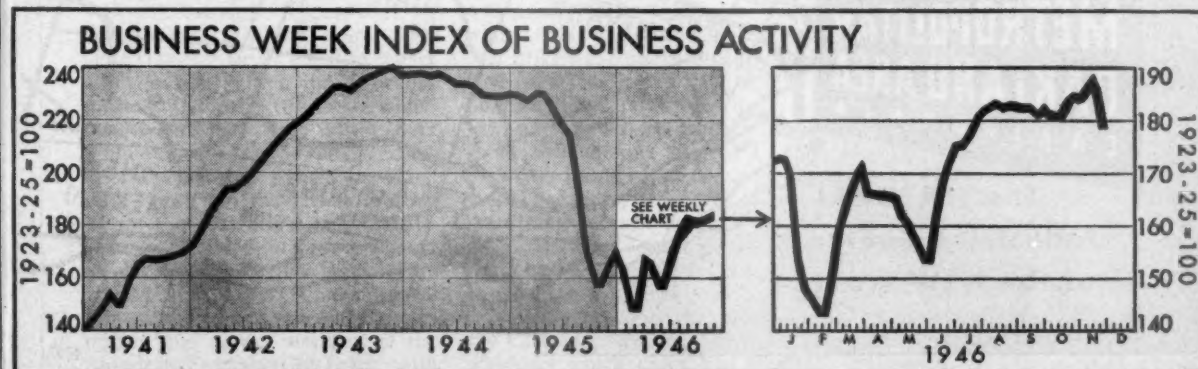
90 stocks, price index (Standard & Poor's Corp.).....	116.0	1113.8	119.3	137.4	78.0
Medium grade corporate bond yield (30 Baa issues, Moody's).....	3.19%	3.18%	3.16%	3.13%	4.33%
High grade corporate bond yield (30 Aaa issues, Moody's).....	2.61%	2.60%	2.60%	2.62%	2.77%
Call loans renewal rate, N. Y. Stock Exchange (daily average).....	11-11%	11-11%	11-11%	1.00%	1.00%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate).....	1%	1-1%	1-1%	1%	1-1%

BANKING (Millions of dollars)

Demand deposits adjusted, reporting member banks.....	40,135	39,840	39,653	40,247	23,876
Total loans and investments, reporting member banks.....	57,791	57,736	58,554	62,381	28,191
Commercial and agricultural loans, reporting member banks.....	10,149	10,156	9,759	6,778	6,296
Securities loans, reporting member banks.....	2,558	2,561	2,551	4,119	940
U. S. gov't and gov't guaranteed obligations held, reporting member banks....	37,859	37,881	39,044	45,501	14,085
Other securities held, reporting member banks.....	3,384	3,380	3,417	3,248	3,710
Excess reserves, all member banks (Wednesday series).....	710	690	830	1,293	5,290
Total federal reserve credit outstanding (Wednesday series).....	24,416	24,314	24,101	24,764	2,265

*Preliminary, week ended November 30th. †Revised. ‡Ceiling fixed by government.

§ Date for "Latest Week" on each series on request.



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Lewis Fined: U. S. Starts Paying

Freight embargo designed as only first of moves leading to nationwide industry shutdown as price of miners' strike. Plans drawn to quota coal supplies by classes of users.

All over the country industries and individuals were banking their fires as John L. Lewis stalked out of court on Wednesday, fined but—so far—still defiant (box).

The Office of Defense Transportation had already clamped a drastic embargo on railroad freight and express, effective Friday. From then on, only the most essential shipments—food, medicine, fuel, newspapers, magazines,

and the like—would move by rail.

• **Prepared for Shutdown**—The steel industry, already trimmed to a 60% operating rate, prepared for virtually a complete shutdown.

In Denver, shivering householders fed their stoves with anything that would burn—fence posts, packing boxes, old furniture.

And in Washington, a desperate Administration planned further conserva-

tion measures designed to cut the nation's coal consumption to less than half the normal rate.

• **Truman's Choice**—The government left the courtroom Wednesday with a choice of two courses in managing the meager supplies of coal still available. It could let the country run along on a more or less normal basis, drawing on the coal piles as long as they lasted, and winding up at the mercy of Lewis in about 30 days. Or it could put in a conservation program that would keep the economy going on a hand-to-mouth basis until the middle of February or the first of March.

Announcement of the freight embargo meant that President Truman and his advisers had decided for conservation. With incoming and outgoing ship-

Verdict May Rally All Unions to U.M.W.'s Aid

As the case of the United States of America vs. the United Mine Workers of America passed its great climax with the imposition of a \$3,500,000 fine against the union and a \$10,000 fine against John L. Lewis, the country turned its attention from the most celebrated trial since the Lindbergh kidnapping to its basic problem of getting coal out of the ground.

• **Oratory Digs No Coal**—As far as could be determined at midweek, the court proceedings had contributed nothing more substantial than some impassioned oratory to a solution of that problem.

Resentful but unmoved, the men who dig the coal received word of Judge T. Alan Goldsborough's unprecedented decision without any sign that they would consider returning to the pits before their union leader gave the command.

• **Double-Barreled Threat**—But if the government's first round legal victory against Lewis failed to attract a single miner to a tippie, it did initiate a train of circumstance which may, before the course is run, have profound effect elsewhere. In his carefully prepared statement to the court, read into the record the day before the sentence, Lewis had declared, "Speaking and acting in my official capacity as president of the United Mine Workers, an organization composed of some 600,000 coal miners, and as vice-president of the American Federation of Labor, with

a membership of almost 8,000,000 of American wage earners . . . I cannot by action or inaction acquiesce in what must be described as the ugly recrudescence of government by injunction."

There was no uncertainty about what Lewis would do in his capacity as U.M.W. president to defy "government by injunction." In refusing to say the word that would get coal production started again, he had already done it. But the question unanswered at midweek, and growing hourly in significance, was what he would do as vice-president of the A.F.L., for which he spoke without challenge from its other officials. Certainly the reference to the A.F.L. had not been capricious; the situation was much too grave for that. Lewis had the A.F.L. committed to support his line of action. What form would that support take?

• **General Strike Possible**—Thus, while so far as a settlement of the coal strike was concerned time might have been standing still, the next important move in the Lewis drama was up to the 15-man executive council which rules the A.F.L. and on which Lewis is the dominant figure. These men, depending on what stake they thought involved for all organized labor, could do anything from issuing a pro forma statement to issuing a call for a general strike.

And behind them, for once, was the C.I.O., caught willy-nilly in the whirlpool which Lewis had created;

the C.I.O. could not hold back from any broad-scale labor demonstration designed to support the union movement's Ajax.

• **Bargaining Stalemate**—Meanwhile, the fact that no real beginning had been made in discussing the issues behind the strike—demands for wage increases and tonnage calculation on unwashed coal (BW—Nov.30'46, p15)—actually deepened the impasse.

Indeed, while the panoply of the judicial process overshadowed everything else, the root causes of the strike seemed forgotten. As Lewis and the government involved themselves further and further in their battle of principles, both found it more difficult to move into the area of compromise.

• **Up to the Owners**—This left only the private operators in a position to talk about adjustments which could end the strike. Technically they are only bystanders because the government, in possession of the properties, is exclusively responsible for the terms under which the miners work.

But uncommitted in the bitter case at bar, the operators, as free agents, could seek arrangements with the union which could simultaneously effect an ending of the strike and the restoration to their control of their properties. While there may be many other diversions before that is accomplished, the coal dispute had no quicker prospect of final settlement.

Oakland General Strike Protests Police Action

The Pacific Coast's first important general strike since 1934—and the biggest the nation has experienced since then—had the Oakland (Calif.) metropolitan area locked in a stranglehold at midweek. An estimated 100,000 members of 142 A.F.L. unions were away from jobs for the second day; C.I.O. workers were heading A.F.L. picket lines.

• **The Cause**—What had started as a localized strike against two Oakland retail stores took on broader proportions. The stores were struck a month ago when they refused to sign a union-shop contract with an A.F.L. clerks' union. On Sunday, Dec. 1, the stores employed the Los Angeles nonunion "Veterans' Trucking Co." to drive merchandise trucks through A.F.L. picket lines. The Oakland Police Dept. furnished an escort.

Union ire turned on the city administration, and the strike swept out of its original narrow bounds.

• **Immediate Effects**—Public transportation was paralyzed after an A.F.L. general strike call. Newspaper publication was halted. Industrial plants and many business establishments closed. All construction was at a standstill. The only trucks on the streets were moving milk to homes or emergency supplies to hospitals.

A.F.L. had ordered "essential services" maintained, and there was no interruption in communications, water supplies, and electric light and power.

• **Grudge Fight**—The original issue—the organizing drive at retail stores—

momentarily was overshadowed. Unions made clear that their general strike was not merely a sympathy walkout, but a showdown fight against the Oakland city administration. Their demand was for "assurance . . . that the city council, under pressure of influential employer groups, will not use the police department as the tool of these groups."

Nevertheless, the willingness of A.F.L. to throw its full strength behind a retail clerks' union was not lost on management in the distribution trade. It was an omen of intensified organizing drives for retail stores. Trouble could be seen ahead not only from A.F.L. but also from C.I.O.

• **City Talks Back**—The city council and Mayor Herbert L. Beach accepted the union challenge. A.F.L.'s action was branded officially as "a physical assault on the rights of more than a half-million people." Mayor Beach asked for the right to take "steps necessary to maintain peace and order" in the face of "an attempt to substitute the physical force of mobs for that of government." The council gave him full authority by proclaiming a state of emergency.

At midweek, a "citizens' strategy committee" was seeking a formula for quick settlement of the entire dispute while at the same time avoiding a test of the city's "get tough" labor policy. A.F.L. leaders were cautioning the strikers to avoid any show of violence.

Government fuel conservation officials were disturbed by the failure of their utility curtailment orders to elicit sufficient cooperation from gas and electric consumers—particularly commercial consumers.

Natural gas pumped through the Big Inch and Little Inch pipelines couldn't make much of a dent in the supply situation. Even at the ultimate rate of 150 million cu. ft. a day, the Inches' contribution would equal only 6,000 tons of coal a day. The 658,000 tons a week expected from nonstriking mines would be more important, but still not enough to change the picture.

• **Cost Estimate**—Dept. of Commerce experts estimate that a 60-day strike would cut industrial production by 25% and throw 5,000,000 workers out of their jobs or force an equivalent cut in hours worked. In terms of national income, it would mean a drop from the present annual rate of \$170 billion to something like \$150 billion. Wage loss to workers would run about \$1 billion a month. Business profits probably would take an even worse beating.

Conservation measures might cushion some of these effects over the full length of the strike, but they were bound to make the immediate cuts deeper. Railroad freight traffic was due to drop to 50% of normal within a week, industrial production outside the most essential lines to go down fast.

• **Delaying Measures**—Solid Fuels Administration figures that by doling out the frozen stocks under its control, it could keep essential services—electricity, gas, and home heating—going in almost all areas. But temporary local shortages could be expected to crop up with increasing frequency.

Denver coal yards were cleaned out by last week end. Hamilton, Ohio, went under complete blackout Wednesday night, with the state guard patrolling the streets. The municipal power plant there was caught with less than a week's supply of fuel.

• **Christmas Outlook**—Retailers, who have been counting on the biggest Christmas in history, are casting a nervous eye at the prospective drop in consumer incomes. However, they could hope that unemployment resulting from the strike would come too late to put a blight on Christmas buying (page 9). The first effects of the drop in incomes probably won't show up until the beginning of next year—and by then they may be swallowed in the inflationary pressures that will come from the interruption of production.

Christmas might be a thin time for many, though. The freight embargo was supplemented by a ban on parcel post shipments bigger than shoe-box size. And passenger runs on all coal-burning lines were restricted to 50% of ordinary schedules.

ments stopped, practically all nonessential plants would have to close sooner or later. The automobile industry was already beginning to shut down.

• **More Orders Ready**—Having gone that far, the Administration was not expected to wait for the automatic effects of the freight embargo to work themselves out. Coal users could look for a variety of orders from Washington aimed at putting the country on an emergency maintenance basis.

The start of the strike caught the country with roughly 76 million tons of bituminous above ground—57 million in stockpiles, the rest in transit or dumped at lake and salt-water loading ports.

Goal of government fuel experts was to string this into a three-month supply by trimming consumption from a wintertime normal of 53.6 million tons a month to about 23.6 million. Here is how the proposed allowances to vari-

ous classes of coal users stacked up (millions of tons):

	Normal	Emergency
Utilities	6.9	2.3
Byproduct coke ovens..	7.9	0.5
Beehive coke ovens....	0.8	
Steel	0.8	0.1
Cement mills	0.7	0.1
Other industry	12.5	6.8
Railroads	10.5	3.6
Retail	13.5	10.2
Total	53.6	23.6

• **Allowance Scheme**—The allowance for such industries as coke, steel, and cement would be just enough to keep ovens and furnaces from freezing. The "other industry" group includes hotels, hospitals, and other carload users essential to public health and safety. Non-essential manufacturers of all sorts were expected to shut down to a maintenance basis.

Coal's Competitors Gaining

Mine operators fear that growing costs and supply stoppages will drive more customers to oil and natural gas. But coal's importance may increase in more distant future.

Coal operators are worrying over the nation's second coal strike of 1946 for a reason that goes beyond immediate income: They see rising costs and interruptions in supply giving new impetus to the trend toward competing fuels, oil and natural gas.

Coal still is the dominant source of heat and power. In the distant future it may even grow in importance. For perhaps some day diminishing domestic supplies of petroleum and gas will force the nation to obtain its gasoline and fuel oil from coal under known chemical processes. (The Germans made synthetic petroleum products from brown coal during the war.)

But, meanwhile, oil and gas have been whittling away at coal's market for years. Railroads, power companies, industrial and domestic consumers have switched for economic, service, or convenience reasons.

• **Railroads**—The growing use of diesel-electric locomotives by the railroads indicates this trend. In 1940, diesels accounted for only 0.1% of the railroads' freight ton-miles, 6.7% of the passenger car-miles, 10.2% of the switching hours.

In the first eight months of 1946

these percentages had jumped to 12.1%, 20.4%, and 32.9%, respectively. The Interstate Commerce Commission estimates diesels displaced 14,136,625 tons of coal in eight months of 1946, against 1,750,039 tons in the like 1940 period.

This shift is relative, of course, for the railroads actually used 66,456,282 tons of coal in eight months this year, against only 52,424,282 tons in the first eight months of 1940.

• **Utilities**—In electric utilities (chart), oil and gas supplied less than 7% of the fuel used in 1920. This year the total will approximate 22%. (Both figures exclude hydro-electric power.)

From 1945 to 1946 alone the proportion of electric power derived from coal dropped from 51.6% to an estimated 49%; at the same time, power from gas and oil went from 12.4% to 14.3%. (In both years water power accounted for the rest.)

• **Households**—Government statistics placed the proportion of homes heated with coal (bituminous, anthracite, and coke) at 54.5%, with oil and gas at 22.5% in 1940. Construction limitations during the war probably helped maintain these ratios.

Now, however, the National Housing Agency estimates that only 27% of the dwelling units planned under the Veterans Emergency Housing Program will use coal, while 52% of them will use gas and 21% oil (BW-Oct.12'46, p49).

• **Lost Business**—Coal operators believe increased prices resulting from settlement terms for last spring's coal strike will cost them 20,000,000 tons a year diverted to other fuels. They look glumly at U. S. Bureau of Mines statistics charting the increase in the value of coal, f.o.b. mines, over the past few years.

In 1942, for example, that value was \$2.36 per ton. Last year it was \$3.08.

• **Increased Efficiency**—Plenty of work has been done—mostly by coal users—to increase coal efficiency. In railroad freight engines, 114 lb. of coal now will do the same amount of work that required 170 lb. in 1920. Electric utilities now use only 1.3 lb. of coal per kwh.; in 1919 they used 3.2 lb. In 1918 the iron and steel industry used 3,194 lb. of coking coal per ton of pig; today the average is 2,635 lb.

For its part, the bituminous industry has set up Bituminous Coal Research, Inc. (BW-Dec.29'45,p36), to foster such projects as improved coal-burning home furnaces and stokers, a coal-burning gas turbine locomotive (BW-Sep.7'46,p58).

ISOTOPE SALES MOUNT

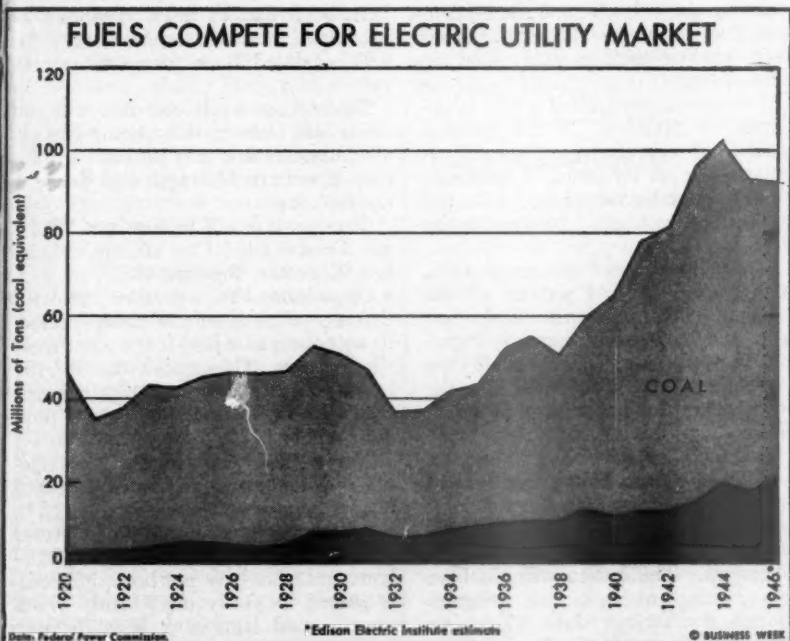
Radioactive isotopes, useful byproducts of the chain-reacting uranium pile, are assuming increasing importance in research laboratories and hospitals.

In the six months since distribution of such isotopes began (BW-Jun.15'46,p17), Monsanto Chemical Co. has filed 160 orders at Clinton Laboratories, which it operates for the Manhattan Engineer District.

All the isotopes sold thus far weigh but a fraction of a pound. The amount is vast, however, compared with the meager quantities previously available through other instruments of production, such as the cyclotron. Sales have totaled \$21,600, roughly the cost of production. In theory, these isotopes would have cost several million dollars if they had been made in cyclotrons; in practice, they would not have been available at all.

Radioactive isotopes are sold in millicuries. A millicurie is the amount of such an isotope which emits the same number of alpha rays (helium nuclei) per unit of time as .001 gram of radium.

Greatest demand has been for carbon 14, produced for \$367 a millicurie. The 45 lots sold total 37 millicuries. Other "major" sales include 42 lots of iodine 131, totaling 1,300 millicuries, and 19 lots of phosphorus 32.



In 1920, oil and gas used as fuel by electric utilities were equivalent to 3,216,000 tons of coal. This year, as more and more utilities convert from the use of coal, oil and gas will displace approximately 20,840,000 tons of coal.



THE EVER-CHANGING DETROIT SCENE

Newest executive of the Ford Motor Co. empire is Frank R. Pierce (left). He's president of Dearborn Motors Corp., wholly owned Ford subsidiary which is being set up to distribute Ford tractors when the motor company dissolves its tie with Ferguson next July (BW—Nov.23'46,p17). Pierce comes to Dearborn from General Motors, where he was vice-president in charge of employee cooperation; had also been sales executive for Frigidaire and Kelvinator. His post at G.M. falls to Harry B. Coen (right), formerly labor relations director on G.M.'s personnel staff, and a front-line negotiator.

World Bank Slur

Wisconsin puts proposed securities on blacklist, scoffs at foreign nations' guarantees. Rebuff may hamper legislation.

The new International Bank's policy of maintaining poker-faced silence about whatever plans it has made for selling securities to American investors (BW—Nov.2'46,p17) is beginning to get it into trouble.

• **On Forbidden List**—In Wisconsin last week, the state banking commission voted unanimously to forbid state banks and trust companies to invest in any obligations that may be issued by the new organization.

Peppery James B. Mulva, commission chairman, remarked tersely that as far as Wisconsin was concerned the guarantee of a foreign country was not worth a "whoop in hell." World Bank securities, he added, would stay on the forbidden list until someone presented him with convincing evidence that they were not merely the unsecured I.O.U.'s of nations that had defaulted on previous promises to pay.

• **Case of Isolationism?**—Metropolitan bankers were inclined to dismiss Wisconsin's stand as a local attack of isolationism. Money market experts rate

the credit of some World Bank members no higher than Mulva does, but they point out that the United States itself has subscribed \$3,175,000,000 of the bank's capital. Another big slice is underwritten by countries, such as England, Canada, Belgium, and the Netherlands, that always have been punctilious about meeting their privately held external debts.

Wisconsin's unexpected rebuff is significant nevertheless. If the International Bank expects to get general acceptance for its securities, it obviously must do a good-sized selling job on the hard-bitten, mistrustful bankers of the Midwest.

Eastern banks and insurance companies probably could put up all the money the International Bank will want, but general acceptance is important just the same. Without it, the World Bank can't hope to put over the low rates and long maturities it has in mind.

• **Need for Legislation**—The Wisconsin commission's stand also is a bad omen for plans to get state legislation next year authorizing savings banks and insurance companies to buy World Bank obligations. The bank's officials have been hoping to ease this program through the various state legislatures without having to fend off any serious attacks. If other state officials follow Mulva's example, they may throw the fat into the fire.

FPC Approves Pipeline Competition in Detroit

Michigan Consolidated Gas Co. this week was happily planning details of financing for a \$90,000,000 pipeline to bring natural gas to the Great Lakes area from the Southwest. A decision of the Federal Power Commission has given the company the right to go ahead with the project, over the protests of Panhandle Eastern Pipeline Co. (BW—Oct.26'46,p52).

This is the first time that FPC has given two pipelines the opportunity to compete in a single market. The decision is unique, also, in that it puts Michigan Consolidated into competition with its gas supplier. Panhandle Eastern at present furnishes the natural gas which the Michigan utility sells to Detroit homes and factories for cooking and heating.

• **Expansion Is Authorized**—Panhandle made a gain of sorts before the federal agency when it was allowed to add 90,000,000 cu. ft. a day to its pipeline capacity. This will enlarge its total capacity to nearly a half-billion feet of gas daily.

Panhandle previously had indicated that it will try to market gas direct to industrial customers. Its enlarged capacity will be helpful in furthering that program.

• **New Network**—The new line probably will not be completed before 1949. It will run for 1,076 mi., coming up from the Oklahoma wells of the Phillips Petroleum Co. to fields northeast of Muskegon, near Austin, Mich. The gas will be stored there for peak seasonal use.

From these fields one line will run down into Detroit. If financing is available, another line may be built to take care of western Michigan and the Milwaukee area.

The pipeline will be run by a Michigan Consolidated Gas affiliate, Michigan-Wisconsin Pipeline Co.

• **Opposition**—FPC's decision indicated that a pipeline company cannot protect its monopoly in a field if it cannot meet all demands. Throughout the lengthy hearings, it was stressed that requirements in the Detroit area outrun present supplies.

Nevertheless, the award of the pipeline to Michigan Consolidated provoked renewed opposition, already expressed in the hearings, from the City of Detroit. The city's position was that the Oklahoma gas fields have not been sufficiently proved to justify investments which can be used later as a basis for rate structures.

The city has been at loggerheads with the gas company for several years over various issues.

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1946



Clarence B. Randall

Richard J. Dearborn

Herbert H. Schell

W. Averell Harriman

They spoke before the N.A.M. convention on industrial relations, research, monopolies, government, and business.

N.A.M. Ponders Labor Issue

Launched during the nationwide paralysis caused by coal strike, manufacturers' convention seeks answer to industrial peace. Many talks are addressed to Washington.

The National Assn. of Manufacturers assembled this week to trumpet this theme: "Now—let's build America!" Ironically, a creeping paralysis was settling on the manufacturing industry while this heroic keynote was being struck (page 15).

One Eye on Washington—N.A.M. members at the annual conclave did not have John L. Lewis, the coal miners' boss, on their program. But they had him on their minds. They told each other in corridor conversations that the coal strike was one of the obstacles blocking the way to sound business progress. Impending strikes to support higher wage demands in other industries made the N.A.M. theme sound even more like a task for Superman.

The 4,000 industrialists met in New York City with one eye and an ear locked toward Washington as usual. Subjects of top concern to management still seemed to have a definite Washington flavor. But there was a budding change in the businessmen's attitude reflected in the program. A tentative kind of "maybe we ought to tell them how to handle it" air was not hard to detect here and there.

Emphasis on Labor—Program planners calculated smartly that managers of industry look upon labor relations as one of the biggest problems overhanging their companies' future.

Industry and government views on the triple threat of taxes, public debt, and inflation were also projected. Two-day appraisals of domestic and international monopolies were earnestly

stressed. So was the research activity of the federal government and its effect on private industry.

Harriman Is Keynoter—The 51st Congress of American industry opened its three-day meeting on Wednesday with Secretary of Commerce W. Averell Harriman, former board chairman of the Union Pacific R.R. Co., leading off with an address on "Government and Business." The man who had divided his time almost equally since 1932 between

his private business connections and service to the government was looked upon by N.A.M. delegates as a happy choice to discuss this topic.

Legislator's View—A luncheon session with Sen. Joseph H. Ball of Minnesota giving a legislator's view of labor strife spearheaded the industrial relations part of the program.

Clarence B. Randall, vice-president of Inland Steel Co. and chairman of the N.A.M. industrial relations program committee, presented his committee's suggestions on the job ahead for management in this field.

A special labor relations session wound up the day with panel discussion and question-and-answer periods led by Sen. Ball, Randall, N.A.M. board chairman Ira Mosher, and the association's counsel, Raymond Smethurst.

Cartels Discussed—Following a delinquent of Justice Dept. policies on monopolies and cartels by Assistant Attorney General Douglas MacGregor, Herbert H. Schell, president of Sidney Blumenthal & Co., Inc., and chairman of N.A.M.'s committee on international economic relations, gave a business view of competitive enterprise versus controlled economies in world trade.

Seminar on Research—R. J. Dearborn, president of Texaco Development Corp., served as chairman of a special seminar on patents and research. Vice-Adm. H. C. Bowen, chief of the Office of Naval Research, explained how cooperation between private industry and the government was being accomplished in the Navy. P. C. Keith, president of Hydrocarbon Research, Inc., told of new developments in industrial research.

Basic Industry—Production prospects in four basic fields of industry were outlined by these men: oil, Eugene Holman, president of Standard Oil Co. (N. J.); machine tools, Robert M. Gaylord, president of Ingersoll Milling Machine Co.; automobiles, B. E. Hutchin-

Swift Cues Packers

A.F.L. meat workers this week compromised second-round wage demands on Swift & Co. with a contract giving an average 12¢ hourly increase.

Negotiations between C.I.O. and major packers are continuing, but there have been few signs of progress (BW—Nov. 23 '46, p108). Recently, the union's strategy committee authorized a walkout if necessary to enforce demands.

In the past, Swift contracts have set the pattern for other major packers. Hence the Swift-A.F.L. contract holds more significance than ordinarily would be accorded an agreement covering only 4,000 of 30,000 Swift meat workers.

The new contract gives a general increase of 7½¢ an hour, additional job and area adjustments.

son, chairman of the finance committee, Chrysler Corp.; steel, Charles R. Hook, president of American Rolling Mill Co.

• **Public Relations**—A three-sided presentation of the N.A.M. public relations

program was made up of a discussion of the underlying philosophy, a moving exhibit of public relations activities, and actual demonstrations of the use of various methods for reaching the pub-

lic with industry's story. Arthur Walsh, executive vice-president of Thomas A. Edison, Inc., spotlighted the need of concrete measures with which to do this job.

Heading N.A.M. Means Travel—and Lots of It



Ever on the go



. . . To conventions

If there are any illusions about the propriety of calling the N.A.M. presidency a "job," listen to this:

Robert R. Wason is winding up a year in that spot. Since he took over the reins from Ira Mosher last January, Wason has traveled more than 50,000 miles, made 145 formal addresses, appeared before two congressional committees, been on the radio 40 times, attended dozens of N.A.M. meetings, and been interviewed in 61 press conferences.

He traveled by planes, trains, taxis, trolleys, and buses in going from border to border and coast to coast. He flew the Atlantic to attend the council meeting of the International Chamber of Commerce in Paris. All these trips cut drastically into the time Wason could devote to the affairs of his own company, Manning, Maxwell & Moore, Inc.

• **On-the-Job Experience**—Wason went into training for the N.A.M. presidency in 1942 when he became a member of its economic principles commission.

Wason became a director of N.A.M. in 1944. He was appointed chairman of the reconversion council in 1945.

• **"Fight-Talk" Campaign**—In carrying professional management's message throughout 1946, Wason made one of the most intensive "fight-talk" campaigns ever undertaken by an American businessman.

In San Francisco—Speaking before the American Legion national convention, Wason reminded returning veterans that "... the war has ended but there is no peace ... the war has ended everywhere except in Washington."

In Minneapolis—Wason said President Truman and OWMR Director John R. Steelman have destroyed America's hope for prosperity because "their rigid controls of the economy have reduced the confidence of the people."

In Evansville—On Oct. 10, he forecast a death for OPA "earlier than now set by law. . . . When Congress reopens in January, it will fan the OPA economists right down the Potomac."

In Pittsburgh—When the steel strike was on, Wason said "strikes . . . have encroached upon the general welfare and the safety of the public. There can be no permanent solution as long as government is partisan. It is essential that the government withdraw as a partisan, that it permit the restoration of collective bargaining at the original sources."

In Toledo—Following the November elections, Wason observed that "the people were farther to the right than either political party."

Next Year—What will Wason do next year? He will serve as chairman of the board of N.A.M., another stay-away-from-home job.



. . . To press parleys or political confabs (with ex-Sen. Arthur Walsh), an N.A.M. president's life is busy.

Nationwide Highway Network Begins to Take Shape

Selection of routes for development of a 40,000-mile national interstate highway network, authorized by Congress in 1944, is nearing completion. The network will connect all cities of 100,000 population, and most of those over 10,000 population, with first-class roads. Where travel is heavy they will be multi-lane. Initially about 40% of the total mileage will be improved as multi-lane routes.

The heavy tide of postwar traffic has spurred the Public Roads Administration and state highway departments into action on the plan. Full agreement on routes is expected before the end of the year, but construction will be slow in getting started because of the shortage of materials, particularly structural steel and, in some areas, cement.

• **Traffic and Accidents Up**—Travel on rural roads in September reached an all-time high for that month, 2.7% above the previous September

peak, set in 1941. The accident toll also is very high. Figures are not available for the entire country but several states are turning up the worst records in their history.

Meantime highway construction costs are climbing. This is retarding work on big jobs more than on smaller projects which contractors can finish off before costs rise over their bid estimates.

• **Some Work Has Started**—Few big projects are actually under way. New York State has let several contracts along the 486-mile Thruway being built to connect New York City and Buffalo at a cost of \$200,000,000. This road is not scheduled for completion until 1951. One other expressway is under construction in New York City proper.

In Pennsylvania work is going ahead on the William Penn highway to push the Pennsylvania Turnpike through Pittsburgh. In Virginia the Shirley highway (above) is being ex-



tended to provide a new four-lane connection between Washington, D. C., and Richmond. Some work is being done on the Baltimore-Washington parkway (below), and on another expressway extending north from Washington. Other expressways on which construction is going ahead include projects in or near Chicago, Houston, Dallas, and Los Angeles.



Federal Works Pushed Despite Economy Order

Another crack in President Truman's ceiling on public works will permit the Army Engineers to start construction of the huge \$40,000,000 Clark Hill flood control and power project on the Savannah River, 20 miles from Augusta, Ga.

They will also resume work on several other projects held up by a freeze order issued last August.

• **No Surprise**—When the first hole showed up in the economy dyke several weeks ago (BW—Nov. 24, p. 31), it was confidently expected that pressure from the grassroots soon would force another.

Sure enough, the Budget Bureau on Nov. 26 authorized increases of \$55,000,000 for flood control and \$15,000,000 for rivers and harbors.

Total appropriations for these two activities now stand at \$190,000,000 and \$105,000,000 respectively for the current year. Still more is in sight for rivers and harbors.

On the same day the Corps of Engineers advertised for bids on several phases of the Clark Hill project, including a major portion of the dam. This had been interrupted in the planning by last summer's curtailment order.

• **Ahead of Congress**—Meanwhile the Georgia Power Co. filed an application with the Federal Power Commission for a license to erect the Clark Hill Dam

with private funds (BW—Sep. 7, p. 20). Early last month FPC held hearings in Atlanta on the company's application.

The commission still is sitting on the case, but it's likely that the new Congress will take an interest in it. That may partially account for the Army Engineers' desire to get actual construction under way.

• **More Activity**—The Army Engineers also are preparing to go ahead with work on the Bull Shoals Dam on Arkansas' White River. This is another flood control project in which FPC and an electric utility have become involved (BW—Aug. 24, p. 26).

FPC has taken no action on the application of the Arkansas Power & Light Co. for authority to erect the power

house at Bull Shoals. Bids for erecting this dam already had been taken when the project was halted by the construction freeze.

Still other flood control projects involving major power installations are scheduled for renewed construction activity. They include: Buggs Island Reservoir in Virginia; Whitney Dam, Texas; Garrison Dam, North Dakota; Fort Randall Dam, South Dakota; and Fort Gibson Dam, Oklahoma.

Board of Trade Digs Its Way Out of a Mess

The Chicago Board of Trade has made substantial progress toward extricating itself from a hatful of lawsuits. • **Well-Intentioned**—Its troubles started in May when it tried to unscramble outstanding contracts after OPA suddenly boosted grain ceilings by from 5¢ (oats) to 25¢ (corn) per bu. (BW—May 18 '46, p17).

On May 13 it prohibited trading in May, July, September, and December, 1946, contracts, except for liquidation, and then at prices not above old ceilings. Cargill, Inc., large cash grain dealer of Minneapolis and no lover of the board, sued, charging violation of the Sherman Antitrust Act and asking undetermined treble damages estimated at over \$1 million for losses suffered (BW—Jun. 1 '46, p57).

• **Change of Heart**—Federal regulatory agencies issued no orders of the type that would have taken the exchange off the hook. So, on May 31, the harassed directors rescinded their May 13 order, instead ordered settlement of all outstanding 1946 contracts in corn, oats, and barley at new ceiling prices, and ordered trading under the new, higher ceilings.

Board member Robert W. Buckley promptly got an early-morning injunction from a federal judge that kept the exchange closed for two hours (BW—Jun. 15 '46, p42). He also sued for damages resulting from losses on corn. Next, three millers and a grain dealer sued for \$120,000 on the board's alleged lack of right to invoke its emergency powers under long-standing Rule 251.

• **Courts Decide**—Last week Judge Michael L. Igoe in U. S. District Court dismissed the four-party suit, but gave plaintiffs' attorneys 30 days to show additional reasons in support of their case. This week Judge Elwyn Shaw dismissed Buckley's damage suit, but gave 20 days to reopen. On the Cargill case, he refused to dismiss and granted 20 days. Meanwhile he soothed the troubled directors of the board by remarking that he could not imagine how an exchange could possibly survive without an emergency rule to invoke.

King Ranch Riches Multiply

Oil wells on fabulous Texas property tap huge new discovery field which may turn out to be the country's second largest producer. Drillers swarm over once-forbidden acres.

Oil discovered on the fabulous King Ranch in Texas reaffirms the old saying that "them as has, gets." Fortune favored it when the clamor for meat raised the price of its fat red steers. Also when the ranch's thoroughbred, Assault, won the Kentucky Derby and other rich stakes. Such providential bestowals are now overshadowed by the oil strikes.

• **Second to One?**—Humble Oil (subsidiary of Standard Oil of N. J.) bought the right to explore the ranch's 1,250,000 acres in 1933. The reported down price was \$3,000,000 (BW—Apr. 26 '41, p24). It now appears that wells on the property in Kleberg County, south of Corpus Christi, tap some of the richest deposits of a huge producing area.

Geologists are excitedly discussing the possibilities of the merging formations in Kleberg, Brooks, Nueces, and Jim

Wells counties. The pools and fields discovered piecemeal may form a single extensive deposit second only to almighty East Texas.

• **Small But Potent**—Outlines of the field develop gradually as successive borings bring in the pay. With the full extent still undetermined, the field appears to extend a maximum of 55 mi. with an extreme width of 7 mi. The 250 sq. mi. thus roughly indicate a fair-sized field, but only a speck compared to the area of East Texas.

Dad Joiner, an incurable wildcatter, confounded the massed scientists of the industry in 1930 by boring into the greatest of all fields where they said none could exist. East Texas underlies 33,900 sq. mi. To date it has produced over 2 billion bbl. of crude.

But unusual characteristics make the

Rotobowling—All Play and No Work

John Q. Public, who sometimes finds it hard to decide how to spend his amusement dollar, will soon be faced with a new enticement—rotobowling.

Equipment will be made and distributed by Rotobowling Corp. of America whose president, Orville F. Whittle, invented the game. A recently purchased factory in Dayton is now being equipped; sales and promotion offices are in Buffalo.

• **Quiet and Decorous**—Whittle originated rotobowling in 1938 at the request of a number of Miami Beach hotels seeking a sport which would be quiet and decorous enough to fit in with hotel atmosphere, and which could be enjoyed by people of all ages and both sexes.

As the name implies, the game has much in common with ordinary bowling. It is played on an alley 94 ft. long and 52 in. wide, and the object is to knock down as many as possible of the ten pins.

Here the resemblance ends, however. The alleys are carpeted with felt and the metal-core pins are incased in rubber, making the game practically noiseless. The sides of the alley are cushioned like those of a billiard table and there are two stationary "hazard pins" about halfway down the alley; the oftener the player

can bank the ball off these, the higher his score.

• **Machine Does Work**—Finally, the 18-lb., hollow aluminum ball is not propelled by hand, but is ejected from a specially built machine which starts it whirling at speeds up to 4,500 r.p.m. before releasing it.

For the present, the Dayton plant will make only this machine; all other equipment will be manufactured under contract. One of the contractors is B. F. Goodrich Co., now installing a special machine for manufacture of the rubber-covered pins.





**Jingle bells! Telephone bells! Yuletide's on the way,
Be sparing of Long Distance calls on Christmas Eve and Day.
Jingle bells! Telephone bells! A million thanks to you
For easing up on greeting calls so urgent calls get through!**

BELL TELEPHONE SYSTEM



CAFETERIA OF THE ROYAL TYPEWRITER COMPANY,
HARTFORD, CONN., OPERATED BY CROTTY BROTHERS, INC.



Employee Feeding helps Increase Output-per-worker

by Richardson Wood, INDUSTRIAL ANALYST

Now confirmed by a post-war survey, manufacturers who maintain in-plant feeding facilities report . . . almost 100% . . . that food-on-the-job directly benefits employee relations.

Some say their restaurants are frequently the deciding factor in securing better type workers: those more intelligent people who scale up the whole employee level. Others mention that convenient eating accommodations help cut "knock-off" absenteeism; keep the personnel happier . . . are an influence in holding their trained men. In lesser ways in-plant feeding also heightens efficiency by combating let-down fatigue, errors and accidents.

While these contributions to increasing output-per-worker are pyramiding, long-range results, 50% of the manufacturers in our survey who have employee feeding experience give such services credit for direct, short-range benefits to efficiency.

★ In-plant feeding was a war-born device to speed production without consideration of cost...but it has now proven itself a peace-time boon in employee relations that can pay its way in helping meet competitive post-war conditions.

From a survey on Industrial Feeding by Richardson Wood. A complete report revealing management experience and opinion with facts and figures will gladly be sent free on request.

CROTTY
BROTHERS INC.

OPERATING IN 13 STATES AND 27 CITIES

137 NEWBURY STREET · BOSTON 16 · MASS.



INDUSTRIAL RESTAURANT OPERATORS EXCLUSIVELY SINCE 1930

new field more interesting than East Texas. That formation produced a crude that was pretty much of a single type. Deposits of the South Texas field are complex. Enthusiastic estimates put its possibilities as high as 1½ billion bbl. of oil, 12 trillion cu. ft. of gas, and 300 million bbl. of condensate (liquids carried in gas).

• **Triple Appraisal**—The Oil & Gas Journal, technical publication of the petroleum industry, has this to say of the South Texas development: "It will probably rank second only to East Texas in oil; second only to Amarillo-Hugoton in gas; and first in condensate."

Original discovery was in Nueces County in 1928. This was at the northern end of the formation. In 1939 oil was found in Brooks County at the southern end. Last year the first strikes were made on the King Ranch. These have expanded into several rich fields.

• **Plenty of Competition**—Engineers make the point that dry spots occur be-



TO COIN A PHRASE

The pithy advertising phrases of Bernice Fitz-Gibbon, advertising director of Gimbel Bros., New York ("Gimbels, Master of Scarcities, Getter of Ungettables . . .") will now be available legitimately to department stores in other cities. Every week, George J. Columbus Associates, New York, will send full-size offset sheets of Gimbel advertising of the preceding week to participating stores—one in each city, and excluding Milwaukee, Philadelphia, and Pittsburgh where Gimbels has stores. Each store will then order engravings or mats it needs, get them in 48 hours. Cost per store varies from \$12 to \$20 a week.



In business insurance the buyer is warned... *not against the seller...* but against his own unfamiliarity with a technical and intricate subject—

JOHNSON & HIGGINS
INSURANCE BROKERS

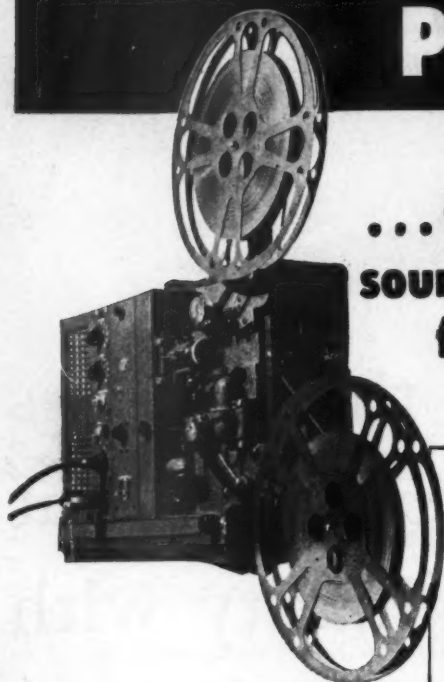
63 WALL STREET • NEW YORK 5

CHICAGO • DETROIT • PITTSBURGH • BUFFALO • TORONTO
WINNIPEG • LOS ANGELES • SAN FRANCISCO • SEATTLE
VANCOUVER • PHILADELPHIA • HAVANA • MONTREAL

It may be just as costly for an amateur to set up an insurance program as it is dangerous for a layman to be his own doctor. For in both cases, technical knowledge, ability, and experience are essential. In business insurance, Johnson & Higgins *have* the knowledge and ability . . . based upon experience gained through serving all divisions of Commerce and Industry for more than one hundred years. We represent the buyer in planning, negotiating and servicing the entire insurance program . . . with "no axe to grind but yours" and at no additional cost.

BUYERS OF INSURANCE FOR COMMERCE AND INDUSTRY SINCE 1845

RCA 16mm Sound Film Projector



... the most lifelike
sound ever obtained
from 16mm film!

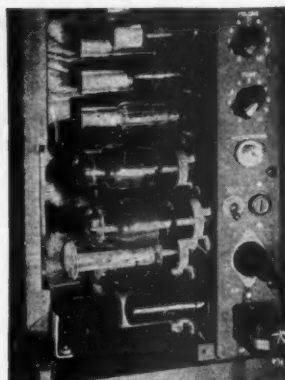
RCA was *first* with 16mm sound—produced the first commercial sound projector in 1931. Today the RCA 16mm Sound Film Projector sets a standard for sound quality unique in the 16mm field.

This fact should be considered carefully in selecting or recommending a 16mm projector. The effectiveness of any presentation is in direct proportion to the clarity of the picture and the realism of the sound. The RCA Projector provides a full 20 watts of high-quality sound output... more than sufficient for the largest audience usually shown 16mm films.

Precision-engineered—simple to operate; easy to maintain—the RCA 16mm Sound Film Projector is ideal for every use where superior projection quality is a "must."

RCA Sound Film Projectors
are ideally suited for use in:

- Business
- Schools and Colleges
- Industrial Training
- Churches



Powerful, 20-watt push-pull amplifier. Employs special inverse feedback circuit. Wide-range tone control. Facilities for using microphone. Unrivalled tone quality throughout sound range.



Extremely sensitive photo-cell sound pick-up. Here is where precision counts. Combines extreme sensitivity and mechanical stability. It gets all of the sound.

FOR COMPLETE DETAILS, write to Dept. 21-L, RCA, 16mm Motion Picture Equipment, Radio Corporation of America, Camden, New Jersey.



16mm MOTION PICTURE EQUIPMENT
RADIO CORPORATION of AMERICA
ENGINEERING PRODUCTS DEPARTMENT, CAMDEN, N.J.

In Canada: RCA VICTOR Company Limited, Montreal

tween the so-far proven fields, that all the pools may not combine. But logically, all become part of a single producing area—which in turn is part of the vast crescent of Gulf Coast reserves between Louisiana and the Mexican border.

While Humble has the King Ranch and other leases well sewed up, it has plenty of rivals in the region. These include the Seeligson-Slick interests (Sunray Oil), Magnolia Petroleum, and Sinclair Prairie.

• **Isolation Outmoded**—For years before Humble signed its lease with King Ranch, wildcatters looked hungrily at the forbidden acres. Founders of this principality ruled it in august isolation. Outsiders (oil drillers included) were not allowed to mess around inside the King fences. Wild tales were circulated about the fate of trespassers. One told of hunters who dared invade the land and just disappeared. An Army plane that crashed in a remote King pasture was not found for months.

At one time a main highway came up to the King boundary and stopped. The ranch owners blocked passage of the artery through their land.

Under more youthful and less autocratic management all this is changed. The tourist now spins along between divisions of the domain. With cheerful clatter, the roughnecks and drillers now pursue their probings for hidden oil pools.

• **Water Counted Then**—Originally this modern principality was a desert of cactus and mesquite. The nucleus was bought in 1851 by Capt. Richard King, who commanded steamboats on the Rio Grande during the Mexican War. An old friend, Robert E. Lee, helped Capt. King decide on a piece of land that included a fairly dependable stream of water.

In those days cactus kingdoms were common in Texas. It was Robert Kleberg, Capt. King's son-in-law, who expanded the ranch into a property that has become so vast and imposing that even the space-proud Texan takes off his Stetson to it.

In those days of the cattle barons, wealth was measured not by the flow of oil, but of water. To sustain his herds, Kleberg drilled wells at strategic points over an acreage greater than Rhode Island's. His sons (especially Robert II) carried on in the paternal tradition, but with a more modern viewpoint. Special power machinery continually clears more land. On-the-job management is applied to every detail.

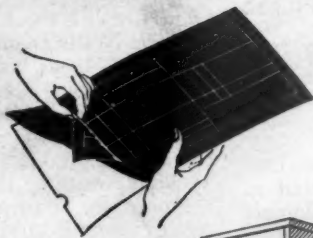
• **The Texas Breed**—Though oil now adds its quota to the family riches, Texans bet that the Klebergs will always be cattle ranchers. They are not the type to sit in absentee chairs on Park Ave. and luxuriate in oil royalties. Young and old, the Klebergs' life revolves

3

Simple Steps

Speed production of paper work . . . control it . . . save money on it—with Mimeograph brand die-impressed stencils

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A new weapon in your fight to reduce your production costs

Management's "white hope" in the coming battle for markets is lower production costs. You cannot, therefore, afford to overlook the major production economies made possible by the new, low-cost Marion Bench-type Induction Soldering Unit. Find out what electronic soldering can do for you. Submit your fabricating problems and sample parts for analysis and soldering to Marion engineers. We will work on them, and return the samples with our recommendations within one week. No charge or obligations.



Marion Bench-type Electronic Induction Soldering Unit

Designed for production soldering of small metal parts and assemblies. It can be used in such diverse fields as electronics, electrical appliances and fixtures, jewelry, toys, motors, paint and general brushes, can sealing, etc.

Low Initial Cost
Lower Operating Cost
Than Average Solder Pot
Better Work — Faster — Cheaper!
Requires No Experienced Help!

This electronic heater increases the speed of soldering operations, and provides a result often impossible with ordinary methods. It simplifies and, in many instances, eliminates subsequent finishing operations. It minimizes rejects and, depending upon application, can pay for itself in 30 days operation. Small and compact, it can be easily moved from bench to bench.

\$360.00 F.O.B. Manchester, N. H.

Foot Treadle extra. Operates on 115 volts, 60 cycle. Consumes only 775 watts at full power output, 100 watts on standby. Submit samples of your work, or write for brochure, Dept. B.



MARION ELECTRICAL INSTRUMENT CO.
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U. S. A. • Cables: Morhanex

In Canada: The Astral Electric Co., Scarborough Bluffs, Ont.

around steers, horses, and cowboys. All three are special King Ranch types.

The Klebergs have developed their own strain of hardy cattle to resist the sizzling Texas climate and the pests it encourages. Assault, the Derby winner, was a byproduct of the ranch's special breed of horses, renowned for their speed, stamina, and understanding of steers.

Even the Mexican cowhands are of the ranch lineage. Present-day individuals represent the third generation of King vaqueros. They are born, they work, and they die inside the Kleberg fences.

NICKEL OXIDE FOR STAINLESS

One of the new steelmaking techniques to flower during the war was the use of nickel oxide to replace part or all of the more expensive electrolytic nickel in alloy and stainless steels.

Last week International Nickel Co., responding to steelmakers' interest in this process, announced it is building a plant at Copper Cliff, Ont., to produce its new product, nickel oxide sinter. The company hopes to put the plant in operation in 1947.

During and since the war, nickel oxide has been supplied to steel companies by Metals Reserve Co. The product is made in a \$35,000,000 Defense Plant Corp. mill in Cuba, operated for Metals Reserve by Nicaro Nickel Co. Output is around 2,000,000 lb. a month.

Future of this plant is uncertain, as Nicaro's parent corporation, Freeport Sulphur Co., is not interested in buying it as a private venture, and Metals Reserve is terminating Nicaro's contract on Jan. 31, 1947.

BANKS HELP SAVE SOIL

To promote soil conservation and farm improvement, the Kentucky Bankers Assn. has authorized the employment of a full-time agricultural field agent who will work in cooperation with the state university and county farm agents. Although other state banking groups have long promoted better farming, this is said to be the first program utilizing a staff specialist.

Newspaper and radio advertising will be used to further a well-balanced agricultural program, as well as to improve farmer-banker relations. An initial budget of some \$20,000 has been set up to further the plan, and the association is planning at least a five-year trial for this activity.

Specific objectives include advocating universal use of cover crops on tilled land in order to protect the soil and provide winter pasture, and stressing the need for greater productivity of pastures and other forage crops.

"I Told You So"

That's what Robert Young says as his fast Pere Marquette coach trains win back traffic, show profit on dining cars.

Take two local trains and an indifferent piece of passenger territory. Add new streamlined equipment; knock an hour off the running time. Advertise heavily for three months, and it all spells "I told you so." Or at least it does when Robert R. Young, the scrappy chairman of the Chesapeake & Ohio, is telling the story.

• **Traffic Nearly Doubled**—Young's two guinea-pig trains, the "Pere Marquettes," running between Grand Rapids and Detroit, finished their first three months of operation on Nov. 10. According to C. & O., their record so far has been everything the railroad hoped.

From Aug. 11 to Nov. 10, the new trains carried 102,031 revenue passengers. In the same period last year, the same runs accounted for only 57,613 passengers.

• **Proves His Argument**—Receipts from operation of the two seven-car trains—



REACHING PARIS BY CAR

New York's mobile radiophone service recorded its first overseas call last week when a man asked for Paris from his car in Times Square and got it. The man who thus proved that there's no getting away from the boss in this age was Thomas H. Beck (above), chairman of Crowell-Collier Publishing Co., who talked to Collier's Paris correspondent. New York Telephone Co. reported 100 calls over the mobile system the first day, most of them to land-wire phones.

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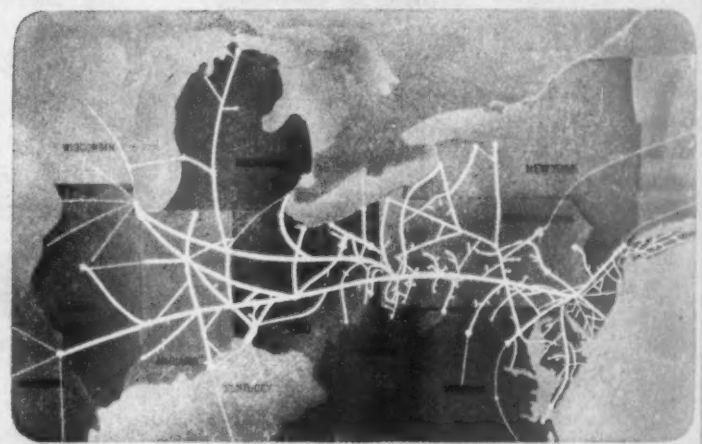
For the Best in Railway and Highway Transportation...
"DO IT ALONG THESE LINES"

BEST IN RAIL... 3400 freight trains and 1300 passenger trains a day—plus the shortest East-West rail route!



BEST IN HIGHWAY... practically the whole 11,000 miles of our right-of-way paralleled by main highways—linked to a great network of fine secondary roads.

BEST COORDINATION OF DISTRIBUTION... "Trains for the long haul—trucks for the short haul."

Supplemented by—the biggest concentrated market... abundant power, natural resources and raw materials... plenty of labor... direct-to-dock service to principal ports, both Atlantic and Great Lakes—everything that counts!



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RAILROAD**

 *Serving the Nation* 

For data on available buildings and sites consult the following Pennsylvania Railroad Industrial Agents:
 CHICAGO INDIANAPOLIS PITTSBURGH PHILADELPHIA NEW YORK
 Union Station 108 E. Washington Bldg. Penna. Sta. Penna. Sta.—30th St. Penna. Sta.
 C.D. WILKINS A. J. VONK J. V. DAVIS B. K. WIMER D.B. LENNY
 H. C. MILLMAN, Broad St. Station Bldg., PHILADELPHIA



Artist - Keith Martin, native of Nebraska

NEBRASKA—annual purchases: \$680 million—mostly packaged.

CONTAINER CORPORATION OF AMERICA



Save Waste Paper

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baggage car, mail car, four coaches, and tavern-diner—indicate full-year passenger revenues of about \$1,250,000. Some \$170,000 of this is coming from meals and drinks, which will mean a fair-sized profit to replace the customary deficit in this department.

Young has been quick to cite his experience with the Pere Marquettes as proof of his often-repeated argument that modern, fast coach trains will win back the passenger traffic the railroads have been losing to airlines, buses, and private cars. The two trains make three trips each way daily, charging minimum coach fares. From the first day of operation, they have carried capacity passenger loads.

• **Not a Cinch**—In picking the Grand Rapids-Detroit run for his test, Young was not betting on a sure thing. For years, this territory has been a poor producer of passenger traffic. Except for Lansing, about midway on the route, residents of the few small country towns along the line have relied largely on private cars or on the frequent bus service that Great Lakes Greyhound Lines runs through the region.

The Pere Marquettes make the run from Grand Rapids to Detroit in two

hours and 40 minutes. Average bus time is about four hours and 30 minutes. Greyhound officials admit some loss of business to the streamliners. They see any expansion of this type of service as a definite threat to their appeal to passengers traveling more than a few miles.

• **"No Tipping"**—The tavern-diner cars have proved particularly popular, C. & O. says. When the trains were put in service, the road kept for itself the complete operation of the dining cars, staffing them with women attendants under the direction of a steward. The "no tipping" policy, adopted by the Pere Marquette R.R. some time before it merged with the C. & O., applies to the new streamliners.

• **To Expand Idea**—C. & O. now is planning to add more cars—a coach and a tavern-diner—to each of the trains as soon as they can be procured. Late in 1947, it hopes to put two twelve-car streamlined trains, similar to the Pere Marquettes, into service on the 184-mile run between Chicago and Grand Rapids.

Running time for this trip will be three hours and 30 minutes, an hour less than the present schedule.

Question on Young's Latest: Does He Mean It?

With the fight between Robert R. Young and the rest of the railroad industry getting rougher every day, no one quite knows how to take the latest brickbat that Young has tossed—a casual statement that he is "looking at" the giant New York Central and might be considering a grab for control of it.

• **A Tough Job**—Most of Wall Street thinks Young was just making the most of an opportunity to needle his old enemies, the Central management. Control of the Central would take big money. There are 6,447,000 shares outstanding, now selling at about \$15 a share. To get, say, 10% of the stock, Young would have to spend upwards of \$9 million, even if he didn't drive the price up in the process.

In any proxy fight to unseat the present management, he could be sure that most of the big blocks held by Wall Street interests would be thrown against him. And aside from everything else there is the question of whether the Interstate Commerce Commission would let Young get into another road.

• **Control Isn't Solid**—But for those who take Young seriously there is this to say: The present management of the Central does not represent

solidly entrenched stock ownership. The biggest blocks of the road's stock are held not by individuals but by "street names," that is, by brokers who represent a great number of small investors and speculators. On the last tally, the biggest single holding was 218,000 shares, listed in the name of Merrill Lynch, Pierce, Fenner & Beane.

By spending about \$3 million, Young could at least make himself or his Alleghany Corp. the biggest single Central stockholder. Those who know him think he might get \$3 million worth of satisfaction out of bobbing up behind the present management and roaring at them.

There's another possible angle. Young's much-publicized friendship with the Duke of Windsor suggests a direction from which some of the money to swing the deal might come.

• **Note of Caution**—But the business of creeping up behind people could work both ways. Young's own hold on his Chesapeake & Ohio has become more and more uncertain (BW—Nov. 23 '46, p80). If he should use all his cash playing an elaborate joke on the Central management, he might look down and find that somebody had been untying his own shoestrings.



SLY DUST Collectors

**Get ALL the Dust—
EVEN THE VERY FINE DUST**

It is the fine dust which does the damage. The fine dust works its way into the bearings and other moving parts of machinery and settles widely over plant and neighborhood.

Only the fine dust is injurious to the human body. The coarser particles are stopped by the nose and mouth; only the very fine particles enter the respiratory system.

A combination of a Sly Dust Filter and a cyclone Collector is not uncommon. Often the cyclone does not collect the fine dust. Then a Sly Filter is added to get it all—by filtering the dust-laden air through cloth.

Sly Dust Collectors are not expensive—in first cost, maintenance, operation. Over 5000 installations. Ask for Bulletin 98 and tell us your problem.



THE W. W. SLY MFG. CO.
4749 TRAIN AVENUE • CLEVELAND 2, OHIO

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SLY

**PIONEERS AND LEADERS IN
Industrial DUST CONTROL**

CAN YOU GUESS THE ANSWERS?

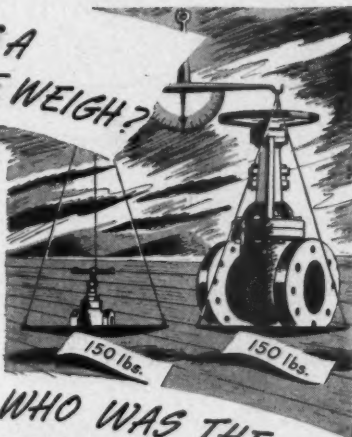


1. WHAT IS THE LONGEST, NARROWEST MACHINE?

Its length measures hundreds, or even thousands of feet. Yet its width measures inches, or only a fraction of an inch. It is wire rope—a machine with as many moving parts as it has wires. A typical wire rope has 114 moving parts. Acco's Hazard Wire Rope Division makes good wire rope of every size.

2. HOW MUCH DOES A 150-POUND VALVE WEIGH?

A 150-pound valve may weigh several hundred pounds—or only a few ounces. But, regardless of size or weight, it is designed to control the flow of fluids at a pressure of 150 pounds. Acco's Reading-Pratt & Cady Division makes valves for pressures from 150 to 1500 pounds.



3. WHO WAS THE FIRST WELDER?



The first worker in iron mentioned by The Book of Genesis was Tubal-Cain. His method of welding was doubtless very primitive. But today, highly developed techniques of welding are used by industry. Acco's Page Steel and Wire Division makes electrodes and welding wire which serve modern welders efficiently.

These are only a few of the primary products made by the 17 divisions of ACCO: Chain • Wire Rope • Aircraft Cable • Fence • Welding Wire • Cutting Machines • Castings • Wire • Springs • Lawn Mowers • Bolts & Nuts • Hardness Testers • Hoists & Cranes • Valves • Pressure Gages • Automotive Service Equipment

ACCO

AMERICAN CHAIN & CABLE

Package Problems

Industry expects shortage of containers and equipment to last until new facilities are brought into production.

Packaging supplies, containers and equipment—still tight after more than a year of peace—will not ease much, if any, in the near future. Some categories, wrappings especially, are facing unprecedented new demands. This was the consensus at the annual session of the Packaging Institute in Chicago.

Packaging's newest big world to conquer is fresh produce. Prepackaging of fruits and vegetables in consumer-size units will require vast quantities of special papers and sheetings, plus machines which have not yet been conceived.

• **Cans, Glass, Paper**—Many products which went into glass and paper during the war have returned to metal cans, but cans are far from plentiful. Can users see the coal strike as only one degree less damaging than another steel strike.

Glass container production hit another new high in October, and further gains may come as new plants get into peak production. But soda ash will

Prepackaging Broadened

Enough Florida vegetables this year will be prepackaged for northern retail markets (BW—Mar. 16 '46, p83) to determine whether prepackaging can be done profitably by growers at shipping points. The shipments will move from a vegetable cooperative at Ruskin; Happiness Farms, owned by Paul S. Phyphers, near Sebring; and the farm of Henderson Raoul near Belle Glade. Other growers may join in the experiment later.

Working with the growers are representatives of manufacturers of packaging and refrigerating machinery and materials, transportation agencies, distributors, and the University of Florida.

To get accurate checks on condition, quality, and sales appeal, the Florida growers plan to use as outlets one or more retail store groups that are already conducting prepackaging experiments in the northern markets.

The Ruskin co-op has sent small trial runs of prepackaged vegetables to market for six years. This winter the co-op hopes to average 4,000 consumer packages daily.

WHAT OUR AREA OFFERS INDUSTRY...



★ GOOD LIVING CONDITIONS

- ★ **CLIMATE** Here is a healthful climate without excessive heat in summer, and with mild, pleasant winters. Truly, desirable weather the year round.
- ★ **GOVERNMENT** Our local governments are efficient and progressive. They are particularly responsive to all projects for the betterment of this area.
- ★ **MARKETS** Our people are among the most prosperous of the South. Surveys show an enormous buying power here—and a growing demand for all kinds of goods.
- ★ **NATURAL RESOURCES** are tremendous. Forest products, minerals, agricultural products, clays—all are being actively developed, and new resources discovered.
- ★ **FINANCIAL** In this area there are banking houses and financial organizations able and willing to cooperate in every way in the progress and development of this section.
- ★ **MANPOWER** Our labor is practically all native-born. This manpower is intelligent, efficient, and cooperative to a degree seldom attained in other sections.
- ★ **TRANSPORTATION** A network of hard-surface, all-weather highways blankets the area. Dependable and fast rail and air lines connect with all parts of the country.
- ★ **PLENTY OF POWER** There has never been a shortage of electric power on the lines of this company. Here power is dependable, cheap, and plentiful—produced by a tax-paying, business-managed company.

THIS is a land of comfortable homes—of comfortable living, in a climate of mild winters and pleasant summers. Here educational advantages are of the best, both in the lower grades and in institutions of higher learning. Recreational opportunities are unexcelled. Yes, it is a land where people live comfortably and work with satisfaction.

We have assisted many industries, large and small, in finding satisfactory locations in the Carolinas. We will be glad to help you—without obligation. Write Carolina Power and Light Company, Development Department, Raleigh, N.C., for any specific information desired.

Lower cost of production—greater profits for the owner—more take-home pay for the worker—in the Carolinas.

CAROLINA POWER & LIGHT COMPANY

Contact **KAYDON** of Muskegon

**FOR ALL TYPES OF BALL AND ROLLER BEARINGS
4 INCH BORE TO 120 INCH OUTSIDE DIAMETER**



KAYDON BEARING SERVICE IS COMPLETE

KAYDON... *The Bearings that say:* *"It CAN be done!"*

KAYDON Bearings are helping to "make dreams come true" for designers of modern machinery now making the most of the technological advances of the past several years. Heavy-duty machines capable of greater speed, heavier loads, greater precision in performance, longer life . . . machines capable of greater production at lower costs . . . are being engineered with KAYDON bearings.

The KAYDON line is so complete, with such a broad line of types and sizes of ball and roller bearings . . . from 4" bore to the unusually large 120" outside diameter bearings . . . that

many former handicaps to design are now removed. KAYDON Bearings have become known as the line that helps designers say: "It CAN be done!"

KAYDON also offers manufacturers of precision parts the following modern facilities and services: Atmospheric controlled heat treating, precision heat treating, salt-bath and sub-zero conditioning and treatment, microscopy, physical testing and metallurgical laboratory services.

Counsel in confidence with KAYDON. Engineers who are specialists in modern bearings will gladly cooperate with your organization.

KAYDON Types of Standard or Special Bearings:

Spherical Roller • Taper Roller
Ball Radial • Ball Thrust
Roller Radial • Roller Thrust

THE KAYDON ENGINEERING CORP.

MUSKEGON • MICHIGAN

be a limiting factor until late 1947 (BW—Oct. 12 '46, p. 32), when new production is due to come in. Glass companies' backlogs are smaller than they were, but large unserved markets are waiting for containers.

Paper isn't expected to become more plentiful until the end of next year, when new capacity will begin production. Pulpwood supply has been helped by decontrol.

• **Machinery Demand**—Machinery currently looks like the tightest of all packaging requisites. All builders have big backlogs, and in this field there seems to be little duplication of orders. Many partly modernized packaging lines are waiting for one or two new machines to bring them up to full efficiency.

Mounting labor costs have been a powerful incentive to purchase new and faster machinery. Coupled with this is greater emphasis on adjustability for handling different sizes. One example is the success of a new adjustable cartoner, with many drug and household specialty plants on its waiting list.

• **Heat Labeler**—Newest machinery sensation of the packaging world is a "glueless" labeling machine, soon to be an-



NOW HE BUILDS IN MUFTI

For its new president, Turner Construction Co., New York, has picked a man who held one of the big construction jobs of the war. Admiral Ben Moreell (above), now retired from active duty in the Navy, served as Chief of the Bureau of Yards & Docks from 1937 until the war's end, directed the Navy's vast shore construction program at home and abroad. He was the first coal mines administrator when the government took over the mines this year.

Draftsmen kept this secret 87 years!

IF IT takes you longer than a minute to reproduce a typewritten report, business form, file card, etc., you're probably not in on the secret yet!

But haven't you wondered why draftsmen always have been able to duplicate their drawings so quickly?

All along, you could have had the same speed in your own work!

The secret is simply this:

Draftsmen always draw and write on translucent paper.

They do this so that reproductions can be made in any OZALID, whiteprint, or blueprint machine. In these units, light rays penetrate the translucent original, exposing sensitized paper underneath.

Opaque originals cannot be printed in this quick, economical manner—they must be copied photographically. And by comparison with OZALID, which employs unique *dry development*, this takes up to 65 times as long!

No wonder leading companies are adopting translucent materials and utilizing drafting-room equipment... or are installing separate units for office use.

One of the world's largest insurance companies uses translucent application blanks... chain store organizations use translucent order forms and inventory lists... colleges use translucent student records... manufacturers use translucent salesmen's reports, production control charts, file cards, etc. Accountants use translucent work sheets and ledgers.

All save time, labor, and dollars.



NO SECRET WHAT THE NEW OZALID STREAMLINER CAN DO FOR YOU!

It's designed for the thousands of offices, drafting rooms, schools, colleges—organizations of every type—who want these extras in printmaking:

Speed! 25 seconds to reproduce your drawn, typed, or printed translucent originals! Even photographic material can be reproduced at this speed from a translucent film positive, which can be made from any negative.

Economy! An 8½ x 11-inch reproduction costs only one cent.

Efficiency! You get easier-to-read positive prints (not negatives) direct from originals. Prints are delivered completely dry, even stacked in order.

Versatility! You can reproduce the lines and images on any of your originals in black, blue, red, sepia, and yellow... on paper, cloth, foil, film, or plastic. Your originals can be up to 42 inches wide—any length. A manifold accounting report a hundred yards long is no problem.

Simplicity! Anyone can feed originals and Ozalid paper into the Streamliner. That's all you have to do!

See samples of translucent papers and cards and the 15 types of OZALID PRINTS you can make from them. Get complete information on the new OZALID STREAMLINER.

Write today for free booklet No. 168.

OZALID

DIVISION OF GENERAL ANILINE AND FILM CORPORATION

Johnson City, N. Y.

Ozalid in Canada—Hughes Owens Co., Ltd., Montreal



In BLACK and WHITE, HUBER RESOURCE-fulness STANDS OUT!

HUBER CONTRIBUTES to the "readability" of your favorite magazine by producing not only the printing inks for which this company is internationally famous, but also the prime white ingredient for the coating of fine paper stock. This substance—Kaolin clay—provides the lustrous whiteness that characterizes every well-printed page.

Huber Kaolin deposits in South Carolina and Georgia, among the largest in the world, deliver thousands of tons of refined clay each month to the paper making and rubber industries.

The resource-fulness of the company's operations, however, has extended its service into many industrial fields. Huber carbon black, which makes jet black printing ink, is also the essential wear-resisting element of tire treads and rubber goods. Other Huber products include natural gas, petroleum and rubber chemicals. Top-notch quality is achieved because Huber controls most of its natural resources and every step of production from the ground up!

J. M. HUBER, INC.
New York; Chicago; St. Louis;
Boston; Huber, Ga.; Graniteville and
Langley, S. C.; Borger, Texas



PRINTING INKS, PETROLEUM, NATURAL GAS AND GASOLINE,
CARBON BLACKS, KAOLIN CLAYS, RUBBER CHEMICALS

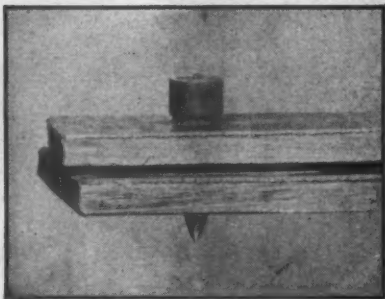
nounced by the New Jersey Machine Co., Hoboken, N. J., in collaboration with Milprint, Inc., of Milwaukee.

Milprint will supply thermo-plastic impregnated paper in sheets or in finished printed labels. Heat, applied by the new labeling machine, makes the labels stick even to plastic containers.



NOT FOR MAYHEM

When's a gun not a gun? When it's a rivet gun, Cleveland's law director has decided, thus removing the Tempotool (above) from the dangerous weapon category. Offered by Tempotool Co., 3716 Clark Ave., S.W., Cleveland, the device uses a blank cartridge for firing power, drives a rivet projectile through layers of steel (below). The cartridge is fired by pressing the barrel end against the target.



Electronic BOTTLENECK-BREAKERS

to **SPEED** your production

Make Moving Webs Run True



When a moving web must be guided through a manufacturing process, it is usually important to keep the lateral position of the strip in a given relation to the processing machine. If lateral position is not maintained, waste mounts, production decreases and costs soar. G-E side-register control automatically keeps the web in correct lateral position. This device is ideally suited for application on slitting, rewinding and side-trimming machines. Bulletin GEA-4410.

PROPER CUT-OFF IS ESSENTIAL IN PACKAGING



Poor cut-off register on imprinted wrappers and packages can spoil the appearance of your product and destroy its sales appeal. Constant vigilance by the packaging-machine operator can reduce, but never prevent, misregister. Electronic register control prevents misregister, and no rejects occur. G-E cut-off register control instantaneously compensates for draw-roll slippage, web stretch and shrinkage, and web speed variations in relation to the cutter. Check Bulletin GEA-4371 for full details.

To time processes rapidly, accurately, automatically

● You'll find many tasks that these small, sturdy, dependable electronic timers can take over and thus release employees from tedious jobs. Five forms cover easily adjusted timing ranges from 0.045 second to 2 minutes. Hundreds are in use on mixing machines, grinders, conveyors, sign flashers, riveters. Several timers can be combined to cover a sequence of operations. Electronic timers are easy to install and economical to operate. Only one moving part—means long life and low service cost. Bulletin GEA-2902.

CHANGE MACHINE SPEEDS INSTANTLY, EASILY—WITH THY-MO-TROL* DRIVE

It's as easy and quick as adjusting the volume control on your radio. And once the machine is set for correct speed it stays there, even while going from no load to full load, because the electronic circuits compensate for fluctuating loads. Result: maintained production and improved quality of output despite load changes. Thy-mo-trol drive includes electronic panel, d-c motor, transformer, and small control station. Operates on a-c power. Standard sizes from 1/8 to 25 hp. Many uses, such as driving drill presses, grinders, lathes, conveyors. Bulletin GEA-4025.

*G.E.'s trademark for motor control using electronic tubes.

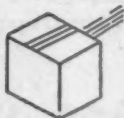


Cut assembly time on small parts



Thyratron control for low-capacity, bench-or-tong, spot welders will speed small-parts fabrication such as welding solid or stranded conductors to terminals, or welding electronic tube elements. These alert, accurate controls have recorded a two-to-one advantage over soldering and riveting. Rejects drop to a new low because of the accuracy and split-cycle response of these controls. They are designed for either 230- or 460-volt, 60-cycle operation, and are rated 77 amperes peak on a duty cycle not exceeding 10 per cent. 50-cycle equipment is also available. Check Bulletin GEA-4175A.

LIGHT on your counting and sorting problems



light touches the objects. Reliable, inexpensive, easy to maintain. Standard forms are available for indoor and outdoor use. Bulletins GEA-1755 and GEA-3533.

● Photoelectric relays can take over the tiresome jobs of counting parts or assemblies; sorting by size, quality, or type; controlling or limiting processes or operations. Can be used to count or inspect freshly painted or delicate parts, because only a beam of

IT'S easier to "keep everything under control" when you turn over many of the routine, mechanical jobs to reliable, economical, electronic control equipment. New operators can be trained more quickly, experienced workmen can be released for supervisory or other more important jobs. Often the addition of electronic control makes equipment more productive and helps prevent waste of materials. Production is not only simplified, but it is speeded as well, and costs are reduced.

Our engineers have a wide experience in designing and adapting electronic equipment. They may be able to make valuable suggestions on how electronic control can improve your operations. All you need do is call our nearest office, and we'll work with you from then on.



This new full-color sound movie will give you and your personnel a broader understanding of the principles and applications of resistance welding. Skillful use of animated drawings and clear close-up shots of the welding processes make this 30-minute movie interesting and easy to understand by all who view it. This film, part of G.E.'s MORE POWER TO AMERICA program, is available for loan without charge from G-E offices throughout the country. Ask your G.E. representative to obtain it for you.

General Electric Company, Section A685-24
Schenectady 5, New York

Please send me the bulletin(s) checked below:

- ☐ GEA-4410 (Side-register control)
- ☐ GEA-4371 (Cut-off register control)
- ☐ GEA-1755 } (Photoelectric relays)
- ☐ GEA-3533 }
- ☐ GEA-4025 (Electronic motor control—Thy-mo-trol)
- ☐ GEA-4175A (Thyratron welding controls)
- ☐ GEA-2902 (Electronic timers)

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Company

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City State 85C0

GENERAL  ELECTRIC

Will History REPEAT on Credit Losses?

CREDIT LOSS CLAIMS PAID BY
AMERICAN CREDIT INDEMNITY
AFTER WORLD WAR I



LOOK AT THE RECORD . . .
THEN SEND FOR THIS BOOK
ON "CREDIT LOSS CONTROL"

FAILURES MULTIPLIED after World War I. As one result . . . in just three years . . . credit losses paid by American Credit Insurance jumped to more than 20 times the 1919 figure.

WILL HISTORY REPEAT? No one knows. But your sound business judgment will tell you that your accounts receivable are valuable assets at all times . . . subject to risk at all times . . . should be protected at all times.

FOR THAT REASON . . . manufacturers and wholesalers in over 150 lines of business carry American Credit Insurance . . . which guarantees payment of accounts receivable for goods shipped . . . pays you when your customers can't.

"CREDIT LOSS CONTROL" . . . a timely book for executives . . . may mean the difference between profit and loss for your business in the months and years of uncertainty ahead. For a free copy address: American Credit Indemnity Company of New York, Dept. 42, Baltimore 2, Maryland.



**American
Credit Insurance**
*pays you when
your customers can't*

OFFICES IN PRINCIPAL CITIES OF UNITED STATES AND CANADA

READERS REPORT:

Taxes and the C. of L

Reading of the Nov. 9 Trend on wage policy leads me again to wonder if your indexes of the cost of living (as applied to wage increases) take into consideration increases in income taxes since 1941.

For most workers an increase of 25¢ an hour amounts to a real increase in spendable income of only about 20¢ an hour after they meet the tax boost. And many a salaried man has found that his recent increases have been just enough to pay the addition in income tax, while the rise in the cost of living has been great enough to wipe out any current savings.

E. Hazen Woods

Midland, Tex.

• The cost-of-living figures we used were the official figures issued by the Bureau of Labor Statistics. They do not include federal income taxes. Two reasons are given for this omission. One is technical: that there is no way to compute a general figure for inclusion in a cost-of-living index, because the income tax varies from individual to individual. The second, which might be called the social reason, is that the income tax, at least in theory, is so designed that the burden is equalized across the board, and hence, can properly be omitted across the board as an element in the cost of living.

The fact remains that there is validity in your point that a comparison of your cost of living today with that before the war is not complete if it doesn't include your increased tax burden. But a general comparison cannot be made with any accuracy.

Proud Record

(1) I noticed with much pleasure that your November cost-of-living table (BW—Nov. 18'46, p. 86) separates the figures on gas and electricity costs from those on fuel and ice. We deeply appreciate your practical help.

H. S. Bennion

Managing Director, Edison Electric Institute,
New York, N. Y.

(2) The facts shown in this manner bring to the utility industry its proper share of credit for achievement outstanding among the industries of the nation.

L. R. Jefferson

Mgr., Rate Dept., Ebasco Services, Inc.,
New York, N. Y.

(3) Your leadership in taking this

RT:

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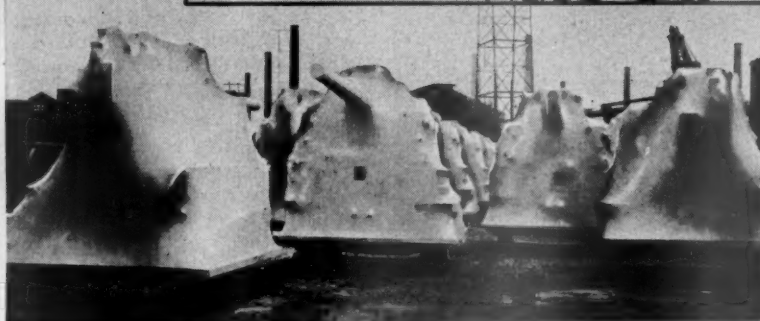
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1946

**OUTDOOR
STORAGE
1941
BEFORE
COCOON**



**OUTDOOR STORAGE
TODAY WITH COCOON**



That is not a junk yard in the top photograph! What you see exposed to the weather are valuable drills, presses, stamps, dies stored in the open for lack of indoor facilities. Today, such equipment can be stored outside *safely*, fully protected against snow, rain, sun by COCOON, the amazing new protective packaging applied with a spray gun. COCOON affords *perfect protection*, during shipment or storage *anywhere in the world*, for anything from a ball bearing to a locomotive!

Whether your protective packaging problems involve electric fans, appliances, machine tools, precision instruments, small parts, or huge machines, it would be to your advantage to find out what COCOON can do for you. Submit your problem to us for analysis. R. M. Hollingshead Corporation, Coatings Division, Camden, New Jersey; Toronto, Canada.

PACKAGE WITH COCOON

A PRODUCT OF

Hollingshead

LEADER IN MAINTENANCE CHEMICALS



Applied with a spray gun Strips off like a banana peel

✓ CHECK THESE COCOON FEATURES AGAINST YOUR PROTECTIVE PACKAGING NEEDS:

Only standard paint spray equipment is needed . . . No rust preventive treatments are necessary . . . Permits packaging of equipment "ready to use" . . . Resists attack by major mildew and mold groups . . . Tensile strength 2000 p.s.i.; elongation 200% . . . Won't soften at plus 180°F.; remains flexible at minus 40°F. . . . Has extremely low moisture-vapor transmission rate . . . Makes packaging easy regardless of size and shape complications . . . Eliminates need for any pre-designed form or fabrications . . . Easily stripped from equipment in long, continuous sheets.

SAVE TIME

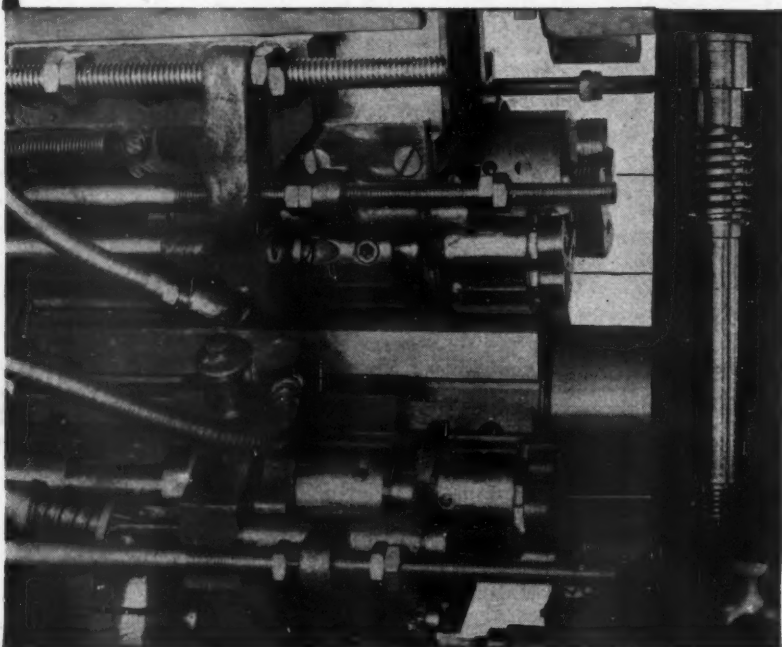
*and you save
money*

Your material costs, and your hourly wage rates, are just about the same as your competitor's. Both are trending upward.

This means higher selling prices, or lower margins. Often it means both.

The one cost factor that is still flexible, within broad limits, is *machine time*.

Acme-Gridley Multiple Spindle Bar and Chucking Automatics, by producing precision metal parts *faster*, are making a lot of cost sheets look better.



An every-day Example

This stainless steel (Type 303) valve stem, 6½" long, ⅞" in diameter, requires 11 separate operations.

An Acme-Gridley Bar Automatic, 1¼"-6 spindle, completes the job in 49 seconds machine time, 73 finished pieces per hour.

That's FAST for a precision job.

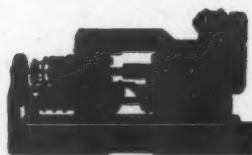
Not a special-purpose machine—it can be quickly tooled to do a thousand complicated jobs that require high precision.

Acme-Gridley Automatics are versatile machines—they have a place wherever precision parts are made in quantities.

ACME-GRIDLEY BAR and CHUCKING AUTOMATICS
Maintain accuracy at the highest spindle speeds and
fastest feeds modern cutting tools can withstand.

THE NATIONAL ACME COMPANY

170 EAST 131st STREET • CLEVELAND 8, OHIO



progressive step is almost certain to be followed by other publications. . . . The old formula of lumping gas and electricity with items that have moved upward in price while these two have moved downward does not do justice to the light and power industry.

James R. Crowell

N. W. Ayer & Son,
New York, N. Y.

(4) Being in the electrical industry, I could not help feeling proud that our industry, along with gas, has registered a substantial decrease in the cost-of-living index while all the other commodities listed reflect a marked increase.

J. P. Gills

Division Mgr., Appalachian Electric Power Co.,
Bluefield, W. Va.

(5) We would very much appreciate your permission to reprint this table in a newspaper advertisement with proper credit to Business Week.

Bentley Barnabas

Kansas Gas & Electric Co.,
Wichita, Kan.

• Said Business Week in publishing its latest table on "What's Happening to the Cost of Living" (BW—Nov. 16 '46, p86): "From now on, indexes of the cost of gas and electricity will be presented separately from those on other fuels and ice. It was felt that the old series—combining fuel, electricity, and ice—which showed a rising trend, did not do justice to the gas and electricity industry, whose product is the only major item in the Bureau of Labor Statistics index that has shown a consistent downtrend."

Cooperative-Tax Exemption

Your articles about the Arcade & Attica Railroad and the Rutland Railroad (BW—Nov. 9 '46, p19, 20) show no recognition of the fact that the former pays no federal income tax nor will the latter once it becomes a cooperative enterprise, as planned—after Rutland bondholders have been paid off by government funds which the author of the project proposes to get by negotiating a Reconstruction Finance Corp. loan.

Farmers Union Grain Terminal of St. Paul, which is vitally interested in the Rutland promotion, is a completely exempt cooperative. It has increased its net worth from \$39,000 to over \$10,000,000 since 1938 through a process of plowing in its tax-free earnings, on which not one cent has been paid to the federal government. . . . Stock control of the Rutland will be in the hands of the tax-exempt regional cooperatives west and south of the St. Lawrence.

As to Arcade & Attica, obviously

Having Research Problems?



*Southern New England's leadership
in research is acknowledged
all over the country*

If the future success of your business depends on hot-from-the-test-tube information, you'll find it at your finger tips in Southern New England.

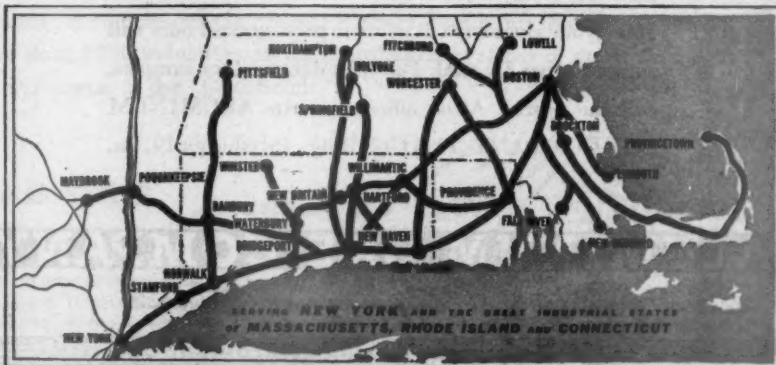
One-seventh of all the Nation's research laboratories are located in Massachusetts, Rhode Island and Connecticut—among them, the highly important industrial and medical research departments of some of America's outstanding educational institutions.

Being "next door" to world-famous re-

search facilities is just one of the many benefits that accrue to industry in Southern New England. For a complete resume of all the advantages available for your new plant, write for the new booklet, "SOUTHERN NEW ENGLAND FOR TOMORROW'S INDUSTRY."

Address: P. E. Benjamin, Mgr., Industrial Development, New Haven Railroad, Room 200, 80 Federal Street, Boston 10, Massachusetts.

THE NEW HAVEN R. R.





Chemically uniform Alorco Aluminas help you control the forces of Nature

Your operators will tell you how tough it is to keep a catalytic process going straight. Introduce materials that aren't exactly right, let the control falter, and you'll likely end up with products that are all wrong.

Chemically controlled Alorco Aluminas are *right*. Uniform, pure, free of iron, and low in soda (if that's what you need). Your processes have proper materials to start with. There's less likelihood of reactions heading off in wrong directions. No chance of poisoning.

Alorco Aluminas are available in many forms suitable for catalysts, carriers, and auxiliary catalysts. Have your chemists tell us their problem and ours will suggest types for trial. For such data and for samples, call the nearby Alcoa office, or write ALUMINUM ORE COMPANY, 1935 Gulf Bldg., Pittsburgh 19, Pa.

ALUMINUM ORE COMPANY



Aluminas and Fluorides

SUBSIDIARY OF ALUMINUM COMPANY OF AMERICA

without having to pay federal income taxes any business would have been able to do right well during the war years—particularly when the railroads were contributing so much of their profit to the federal Treasury.

Since your publication is so widely read by businessmen everywhere, and your reporting of business situations is so accurate, on the whole, to omit comment on this tax exemption might cause resentment on the part of businessmen who are well aware of the tax privilege currently enjoyed by the cooperatives.

Ben C. McCabe
Pres., National Tax Equality Assn.,
Chicago, Ill.

• Business Week, like Mr. McCabe, assumes that its business readers were well aware that a cooperative enjoys such special tax exemptions, did not think it needed to underline that fact—but might well have done so in these unusual cases involving railroads

No Appeasement

I have read your Washington Bulletin item which starts by saying, "President Truman will carry his battle with John L. Lewis to a showdown. In the end it's hard to see how the President can avoid capitulation" (BW—Nov. 23 '46, p9).

The way your reporter writes you would appease this man Lewis and all the labor leaders, racketeers and non-racketeers . . . you cannot appease a tiger.

C. Birsteen
Pres., Hobert-Stone Co.,
Cleveland, Ohio

• And we wouldn't think of trying to. This was not an argument but a factual report on the weapons that this Administration is likely to find for use against Lewis. It reported that, for hard reasons recounted at length, those weapons looked weak to Washington.

"Discerning"

The four Labor Angles devoted to a comparison of the British and American labor movements were as discerning a piece of industrial-relations writing as I have ever seen in many a day. My congratulations and sincere appreciation for some thinking that helped me to see beyond some of the day-to-day preoccupations of our labor problem.

James O. Rice
Editor and Asst. Sec., American Management Assn.,
New York, N. Y.

• A combined reprint of these four Labor Angles may be obtained by writing Paul Montgomery, Publisher, Business Week, 330 W. 42nd St., New York 18.

THIS IS NUMBER **100** IN A SERIES



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One hundred times in the last seven years, United Gas has told the nation the industrial advantages of the "Gulf South." Full page ads in national magazines have told the story of materials, markets and manpower in the five-state area served by United Gas. There's a place for your plant in the "Gulf South" . . . a place for **NATURAL GAS** in your plant and in the homes of your workers. United Gas pipe lines are vital arteries of industry, a complex maze of steel carriers supplying the finest of fuels to more than 1,700 industries, to the distribution systems of more than 300 cities and towns in the "Gulf South."

UNITED GAS . . . serving the *Gulf South*

Write Director of Industrial Development, P. O. Box 1407, Shreveport, Louisiana

For inquiries to the following cities, address **UNITED GAS PIPE LINE COMPANY**: IN TEXAS—Beaumont, Dallas, Fort Worth, Houston, Longview, San Antonio and Wichita Falls; IN LOUISIANA—Baton Rouge, Lake Charles, Monroe, New Orleans and Shreveport; FOR MISSISSIPPI, ALABAMA and FLORIDA—Jackson, Mississippi. For inquiries to the following cities, address **UNITED GAS CORPORATION**: IN TEXAS—Huntsville, Jacksonville, Laredo, Marshall, Mineola, Nacogdoches, New Brownfels, Schulenburg, Sinton; IN LOUISIANA—New Iberia, Opelousas; IN MISSISSIPPI—Gulfport, Laurel, McComb.

test pilot at work



Pfaudler Glass

Keeps him on the beam

Getting Penicillin into commercial production was one of the most significant contributions of American Industry to medicine. It was all done through pilot-plant testing in equipment similar to the Pfaudler glass-lined, steel assembly shown above.

One of the special advantages you get with Pfaudler glass is maximum resistance to all acids (except HF) at elevated temperatures and pressures. It protects sensitive products against contamination besides preventing corrosion. And with this you obtain wide processing flexibility. Should the process change, requiring different acid conditions, the equipment remains equally useful. You don't have to scrap it. This may not be possible with any other material of equipment construction! These are the major requirements for pilot-plant work.

Whether you require laboratory, pilot-plant or commercial processing equipment, Pfaudler glass gives you the same degree of protection all along the line, keeps quality on the beam. The Pfaudler Co., Rochester 4, N. Y.

Pfaudler
ROCHESTER 4, NEW YORK
WORLD'S LARGEST MANUFACTURER OF
GLASS-LINED STEEL EQUIPMENT

AVIATION

Light Planes Face the Future

Sales made a record this year, are now declining. Market for two-seaters nears saturation. But makers are optimistic over prospects for larger models—if the price can be kept down.

As the biggest year in the history of personal-plane production closes, manufacturers are facing an increasingly uncertain future.

It is estimated that total sales for the year will come to about 30,000 planes. Two companies—Piper and Aeronca—each produced more than 1,000 planes in October, the first time this mark has ever been reached by one company in a single month.

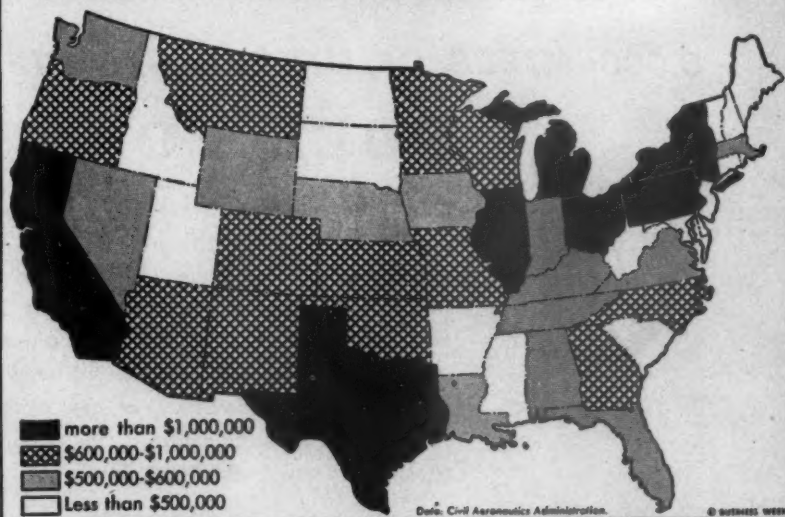
• **On the Dark Side**—But high production has cut heavily into the order backlog. Unfilled orders of nine companies for which comparable figures are available dropped from a high of 33,003 at the end of September to 24,490 a month later. Since the decline is considerably greater than the month's sales, it seems likely either that a lot of prospects have been changing their minds or that the backlog statistics are heavily watered with duplicate orders.

Unsold dealer inventories are already visible on airports. Some dealers, in order to make their sales quotas, are reported to be knocking as much as 20% off of list prices and making inflated allowances on trade-ins.

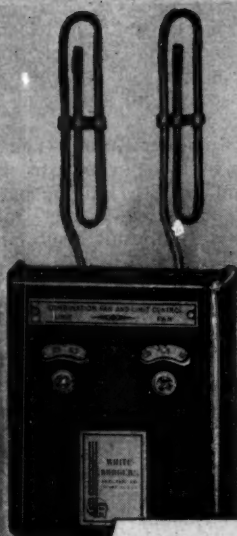
• **Not Up to Expectations**—One fact is becoming increasingly evident: The purely personal aircraft market is not as large as it was wishfully believed to be. W. T. Piper, for years the Ford of the field, asserts that personal use of airplanes is basically limited; that mass production is not now in the cards.

One big market that the industry had hoped to tap consisted of the wartime pilots and the thousands of veterans studying flying under the G.I. Bill of Rights. It now appears that this hope was perhaps the most overoptimistic of all. It has been estimated that at least 75% of the G.I. trainees are merely grabbing the government-financed air

WHERE THE AIRPORT FUNDS WILL GO



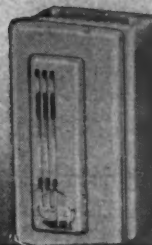
Initial apportionment of funds for airports under the Federal Airport Act (BW—Mar. 30 '46, p19) sees just under \$31,000,000 earmarked for the various states of the \$45,000,000 appropriated for the year ending June 30, 1947. The money is divided up according to area and 1940 population, each carrying an equal weighting. Thus Texas—first in area and a very good sixth in population—gets the biggest slice, \$2,081,311. New York, though well down the list in area, earns second and \$1,846,180 because of its population. Battling it out for 47th, 48th, and 49th are Rhode Island, the District of Columbia, and Delaware.



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for heavy duty, line-voltage
space heating or cooling.



SPACE THERMOSTAT
remote bulb type for control
of temperature away from
switch location.



ROOM THERMOSTAT
for residential heating and
air-conditioning.

**COMBINATION
FAN & LIMIT CONTROL**
quicker mounting, positive con-
trol of high limit and fan opera-
tion for warm-air heating.



**COMBINATION
CIRCULATOR AND
LIMIT CONTROL**
Independent dual controls in
single case, for hot water
heating applications.



**DIAPHRAGM
GAS VALVE**
quiet and positive operation,
may be operated manually in
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high-pressure cut-out and
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REFRIGERATION-
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variable temperatures within
preselected ranges for gen-
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**REFRIGERATION
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low or high-side pressure con-
trol with wide range and
adjustable differential.

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WHITE-RODGERS ELECTRIC CO.

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Controls for Refrigeration • Heating • Air Conditioning



It's a long step (and a long

wait) between a brilliant idea and a salable product. Can this expensive time lag be reduced? Yes . . . by "Mass Precision" methods!

What is "Mass Precision"? It's engineering know-how, plus research, plus modern machines in the hands of skilled workmen, plus the finest gaging equipment. It's a method that Nichols has developed and refined for over 40 years. It's a method that quickly translates good ideas into simple, highly accurate products that can be mass produced, on a strictly interchangeable basis, at low cost.

Our new booklet "Mass Precision" shows what we've done for others . . . perhaps it will suggest what we can do for you. Write for your copy today.

W. H. NICHOLS COMPANY, 48 WOERD AVENUE, WALTHAM 54, MASS.



"Accurate" *Nichols*

PRECISION ENGINEERING AND MANUFACTURING FACILITIES FOR MASS PRODUCTION

time for fun. The other 25% are serious, but it is unlikely that many will get pilot jobs. And probably not more than one in 100 G.I. students or Air Corps vets can afford a plane at today's high price levels.

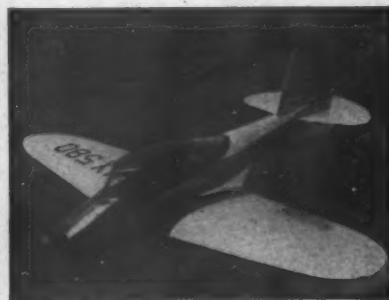
• **Two-Seater Record**—The swift expansion of flying schools to meet the demand for G.I. training has created an unprecedented market for two-place planes. As a result, a substantial portion of this year's record sales is in that category.

But the training program is bound to peter out in a couple of years, even if an economy-minded Congress doesn't pinch it off before then as a boondoggle. Manufacturers have about resigned themselves to the realization that the market for these planes is now approaching saturation.

• **Disappointed**—Another reason for pessimism in the industry is the fact that a lot of people who have bought private planes aren't too happy about it. A government survey, which will not be publicized, heard from "the man who owns one" that: (1) Cost of maintenance is often higher than was estimated; (2) many service stations are lackadaisical, unreliable, exorbitant; (3) usefulness of planes doesn't come up to owners' hopes; and (4) registering the plane and keeping qualified as a pilot are tiresome and expensive.

• **After 40 Years**—Many people have expressed surprise that public acceptance of the privately owned plane 40 years after its invention has nowhere near approached acceptance of the automobile at the same period in its history. Two explanations are offered:

Personal planes are basically the same



"Family" planes both: Piper's Sky-sedan (above); Republic's Seabee.



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1946

today as 20 years ago. They fly perhaps about 30% faster and a good deal further, with a little less power, cost a bit less, and are somewhat more comfortable. But many of them are no safer, and nearly all land as fast, and hence require as much ground space, as in Lindbergh's day.

Many qualified observers assert that the analogy to the automobile is not valid. They point out that, in terms of price and everyday utility, a comparison with the market for speedboats would be more apt.

• **Faith in the Future**—Most manufacturers, however, still stoutly maintain that the industry has a good future. They are certain that, even if business does slide off some from this year's peak, it will still be substantially better than it ever was before the war.

They point out that, since 1929, the number of licensed pilots has increased from 31,264 to about 362,000. There is no doubt in their minds that most of these people want to keep on flying. And many of them, they say, are potential customers if the price is right.

• **Big Field in Rentals**—Another large potential market is made up of the operators of rental, or "fly-it-yourself," services. Right now, the average use of planes by private owners is only about 50 hours a year. At the rate of \$8 to \$15 an hour that the rental operators are expected to charge, an average year's flying (50 hours) would come to a maximum of \$750. Many pilots who can't afford ownership at present prices ranging upwards from \$2,000 will be glad to take advantage of these rental services, free of worry over maintenance and responsibility for damage.

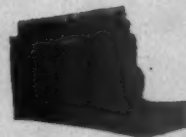
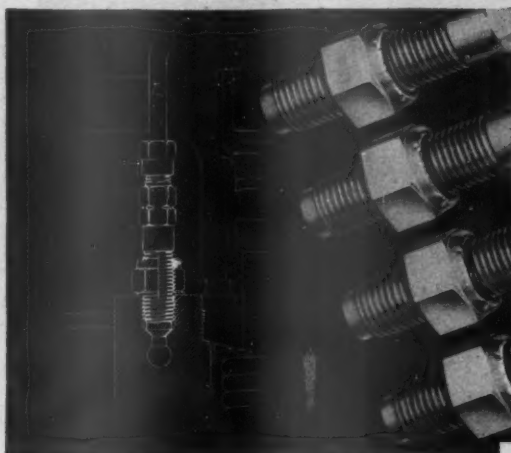
One of the factors that has been holding back sales is the lack of small, convenient airports. But the seven-year field-construction program, which has already gotten under way (page 44), under which \$500 million of government funds will be matched by an equal amount contributed by the states, should eventually turn this liability into a good selling point.

• **Trend Toward Larger Planes**—Manufacturers, resigned to the fact that the market for two-seaters has already passed its peak, are concentrating more on four-place and larger planes. Rural dwellers, with plenty of space for their own hangars and flight strips, should buy just that many more planes than city folk. Granted continued prosperity, business concerns will represent an increasing market for planes of the "executive" type, both for speed and for prestige.

Some builders think the four-place family model will succeed at prices between \$4,500 and \$8,000, where the two-seater coupe has failed. Export will help some, too. The industry believes that this demand for larger planes will

SELF-SEALING

*Prevents
Oil Seepage*
ALONG FUEL LINE STUDS



HEAVY DUTY DIESEL ENGINE

**The Red Elastic Collar seals the threads
tight against LIQUID SEEPAGE**

Three important benefits result from the use of ESNA Elastic Stop Nuts on Diesel engine fuel line studs. *First*, operational safety. The Red Elastic Collar is self-sealing against fuel oil operating pressures up to 60 psi. *Second*, design simplification. The Red Elastic Collar is self-locking anywhere on the stud. It permits the use of straight threads—instead of individually gauged tapered threads—for the oil supply block connection. *Third*, faster assembly. Straight threads permit the accurate positioning of the studs between the block and fuel line—before the finished surface of the Elastic Stop Nut is fully seated and self-locked and self-sealed against the copper washer. The total result? Threefold economy!

Multiple protection—against Liquid Seepage, Vibration, Corrosion, Thread Failure and Costly Maintenance—has made Elastic Stop Nuts the standard fastener on many products. Standardization achieves the double economy of inventory simplification and reduced procurement costs. For further information address: Elastic Stop Nut Corporation of America, Union, New Jersey. Sales Engineers and Distributors are located in principal cities.



**LOOK FOR THE RED COLLAR
THE SYMBOL OF SECURITY**

It is threadless and permanently elastic. Every bolt—regardless of commercial tolerances—impresses (does not cut) its full thread contact in the Red Elastic Collar. This threading action produces a compressive, radial-reactive pressure against both the top and bottom sides of the bolt threads... insures a permanently tight, full contact between the bolt and nut threads... and makes all Elastic Stop Nuts self-sealing against Liquid Seepage.

As a result, all Elastic Stop Nuts protect permanently against thread corrosion and resultant failure.

ESNA
ELASTIC STOP NUT

ELASTIC STOP NUTS



**INTERNAL
WRENCHING**



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PRODUCTS OF: ELASTIC STOP NUT CORPORATION OF AMERICA

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**This USPM Plan-Board
makes Mailroom Planning
QUICK...EASY...CONVENIENT**

SYSTEM in the mailroom was never more important than now! Let a USPM specialist show you how scientific mailroom planning will speed up and smooth out your mail handling operations.

With the USPM Plan-Board illustrated above, he will design a new mailroom or redesign your present one right in your own office to meet your particular requirements. Trained to solve any mailroom problem, he will provide you with a tailor-made plan incorporating work routines, systems and equipment that will step up not only your mail handling but your entire office operations as well!

Mailroom modernization with USPM Systems and Equipment pays for itself in time and money saved—and in added work-hours it gives your whole organization. Call in your USPM specialist and put USPM Planning Service to work for YOU.



SEND FOR NEW FOLDER. Contains detailed information on USPM Service, Systems and Equipment. Address Department BW-126.

Metered Mail Systems... Letter and Parcel Post Scales... Letter Openers... Envelope Sealers
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Rochester 2, New York
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**COMMERCIAL
CONTROLS
CORPORATION**



All-purpose jobs: North American's Navion (above); Beechcraft's "35."



create a new market, smaller in unit volume but larger in dollars.

• **Striving for Economy**—A number of attempts have been made to use wartime discoveries in aerodynamic and structural efficiency to develop a four-place plane, flyable with lower power and salable at lower cost. Perhaps the most notable achievement is the Republic Seabee, in the development of which no stones were left unturned to cut costs. But in spite of basic improvements in design and tight buying of accessories and equipment, the rising tide of production costs forced successive increases in the selling price of this four-seater from \$3,995 to \$4,495 and then to \$6,000.

Piper is nearly ready with its four-place Skysedan. But production is lagging while efforts are made to keep costs down. The company hopes to be able to sell the plane for less than \$5,000.

• **Long-Term vs. Short-Term**—As greater utility is designed into planes, as new airports are built, and as aids to blind flying develop, manufacturers are sure the family market will develop.

In the meantime, many of them are seriously considering devoting primary attention to markets where planes are able to pay part of their own way—as capital equipment in business, industry, and agriculture.

• **The Ideal**—The real air-happy dream is a machine that can stand still in the air, creep home in storm and darkness, fly fast enough to buck headwinds, land anywhere, and sell for less than \$2,000. That is the sort of thing that could jostle the automobile industry. It is theoretically possible, technically difficult, and certainly many years away.



In the "RUST BOWL" *Yoloy wins again*

Youngstown's High-Tensile Low-Alloy Steel demonstrates superiority on Atmospheric corrosion-test racks

THE "gridiron" shown above is a battery of test racks located on the Eastern seacoast of the United States. Hundreds of samples of various steels and metals are exposed on these racks to severe marine atmosphere and are examined periodically to compare the results of various samples. Similar racks are placed in industrial and rural locations.

On these racks and in actual service tests, Youngstown's high-tensile low-alloy steel, familiar to steel users everywhere as "Yoloy," has proven itself to resist corrosion several times better than mild carbon steels.

This unusual ability of Yoloy steels to resist corrosion is due to the influence of its nickel and copper content. These same two constituents give Yoloy other valuable properties—extra tensile strength, added impact strength at low temperatures, good ductility, easy weldability, and increased resistance to abrasion.

Whenever you have an extra tough job for steel, or where you want to reduce dead weight without impairing strength consider Yoloy—the steel that's tested and proved in the laboratory of time. Let us discuss your requirements for future construction.

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THE YOUNGSTOWN SHEET AND TUBE COMPANY
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Spikes - Coils - Electrolytic Tin Plate - Coke Tin Plate

MARKETING

Peoria: Yardstick for Sales

Silex Co., in carefully controlled test, discovers cheerful news about normal postwar market. Six-month volume shows 1,760% net increase over corresponding 1940 period.

Last May the Silex Co. set out to find its own answer to a question that keeps many a manufacturer awake at night: How big will its normal market be after the first flush of postwar buying subsidies?

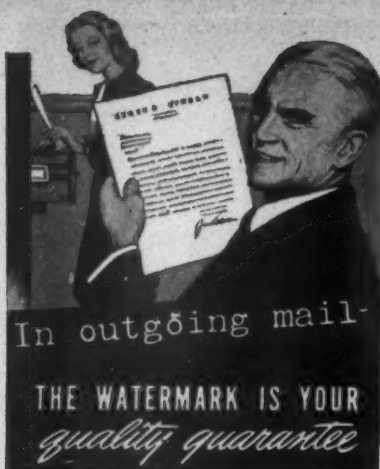
Silex sought the answers in a carefully controlled market test. It flooded the Peoria (Ill.) market with all the Silex coffeemakers it would take (BW—Jun. 15 '46, p70). The company also invited other manufacturers to stage their own market saturation tests concurrently in the same area (which includes ten adjacent counties).

• **Cheerful Report**—This week Silex came up with a report. It should cheer other manufacturers who are wondering how substantial their present order

backlog really is. Silex found that the number of coffeemakers sold in the Peoria area from May through October exceeded that of the corresponding 1940 period by 1,760%.

This was a net increase, after making an arbitrary allowance for the lack of other durable goods that normally would be on hand to compete with Silex products.

Allowance was made also for possible movement of coffeemakers to dealers in other territories (a factor Silex took elaborate pains to prevent). J. M. Moore, general sales manager, estimates that at least half this increase represented retail sales. The rest was dealers' and distributors' stocks. (The company also makes household steam irons, but



In outgoing mail—

THE WATERMARK IS YOUR
quality guarantee

BE SURE
IT SAYS
3 THINGS

- 1 Does It Contain Cotton Fibre?
- 2 How Much Cotton Fibre?
25%-50%-75%-100%
- 3 Who Made It?



• Hold one of your blank sheets of letter-head paper to the light. Now compare the information it reveals with that shown on the Fox River sheet as illustrated above.

• It's important that the watermark reveals these three qualities because the finest papers are made from cotton fibres . . . the more cotton fibres the finer the paper. Finally, it should reveal who makes it — like Fox River — makers of fine cotton fibre papers since 1883.

• Ask your printer, lithographer or engraver about Fox River papers. He'll be glad to recommend the paper with the correct cotton fibre content for each business need.

BOND, LEDGER AND ONION SKIN PAPERS



FOX RIVER PAPER CORPORATION
421-L S. Appleton Street • Appleton, Wisconsin



FOR RUG CUTTERS: STANDING ROOM ONLY

Gimbel Brothers in Philadelphia has devised its own Hit Parade promotion to serve hep cat patrons without having them stage impromptu but lengthy jive sessions in listening booths. Each Monday the store puts the week's 20 top tunes on two banks of self-service turntables (above), which start automatically when earphones are lifted. The store lists three benefits: The burden on sales clerks is lightened, stock records last longer, the listening turnover has increased since the "jive hounds" get foot-weary and self-conscious. Lovers of the classical (and higher-priced) disks have priority on the booths.



The man behind the Peoria market saturation test is J. M. Moore, 43-year-old general sales manager of the Silex Co. He learned market research by applying it first to life insurance, later to electrical appliances.

these were not included in the sales tabulation.)

• **Longer Than Expected**—But that wasn't all. Silex found that its initial boom period, when customers rushed to grab any hard lines available, lasted six months instead of the expected three. However, 68% of the sales to consumers occurred in the first three months.

Sales in June, the second month of the test, exceeded those of May by 6%. In July sales dropped back to about half of May. In August they lagged still further, but in September they shot up to double August. October, which declined to the August level, represented 5% of the total period's sales, but even this was 198% higher than the monthly average of 1940.

• **Others Test the Market**—About a dozen other manufacturers, including some making radios and electrical appliances, are staging market saturation tests of their own in Peoria. So far none has accepted Moore's invitation to swap experiences. There is evidence that some manufacturers of soft goods are also participating quietly.

Relatively few Peorians are aware that they are the fortunate subjects of these experiments. The company's 239 dealers were not permitted to advertise Silex coffeemakers during the first 60 days of the test. Newspapers cooperated by withholding publicity. So effective was this muzzle that distributors' salesmen still occasionally find dealers who are unaware that they can get all of

"They don't know when to quit" . . . that's what planing mills, veneer, plywood and woodworking plants and pulp and paper mills say about Simonds Machine Knives. They buy the Knives with the Red Back because they know these are the Knives made of special Simonds steel . . . specially tempered to stand the toughest cutting . . . then ground to precision flatness to assure uniformly accurate dimensions and smooth finish.

Tell your dealer to have the Simonds Knife Specialist drop around to look over your cutting operations with all types of Knives. Or call the nearest Simonds office. No strings or obligations attached.

BRANCH OFFICES: 1350 Columbia Road, Boston 27, Mass.; 127 S. Green St., Chicago 7, Ill.; 416 W. Eighth St., Los Angeles 14, Calif.; 228 First St., San Francisco 5, Calif.; 311 S. W. First Avenue, Portland 4, Ore.; 31 W. Trent Ave., Spokane 8, Washington. *Canadian Factory: 595 St. Remi St., Montreal 30.*

SIMONDS
SAW AND STEEL CO.
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making Quality Products for Industry

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Wheels
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SIMONDS
SAW AND STEEL CO.
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Specialty Steels
Specialty Steels



It's a giant job to daylight the Northern Pacific shops at Brainerd, Minn. An old hand at these big jobs, Insulux Glass Block was a natural choice. Ceiling-high Insulux panels give uniform distribution of daylight. Notice the absence of shadows.

Insulux gets the "high ball"

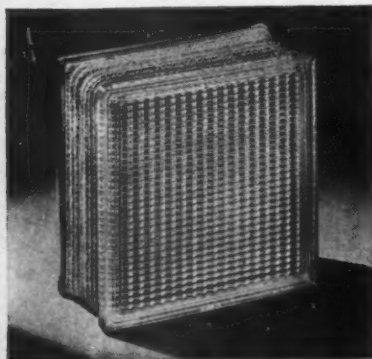
Many railroads and a wide range of other businesses have given the go-ahead sign to Insulux Glass Block.

Insulux panels are easily installed. They resist moisture and even cor-

rosive fumes—thus cutting maintenance expense in buildings where severe conditions are the rule. High insulating value of the block means less heat loss—lower fuel bills.

Cleaning is simple, or they will serve well without cleaning.

If your business plans modernization or expansion, look into the advantages of Insulux Glass Block. For details, write Dept. C-44, Owens-Illinois Glass Company, Insulux Products Division, Toledo 1, Ohio.



Insulux Glass Block is a functional building material that has solved problems for hundreds of businesses. Investigate!

★ ★ ★

OWENS - ILLINOIS

INSULUX
GLASS BLOCK

the Silex coffeemakers that they can sell.

- **Continuing Project**—Moore considers that by January the Peoria market will represent a postwar normal. Surge buying will be over, the pipelines will be full, and the prices adjusted. (On Dec. 1 the prices of electric and nonelectric models moved from a range of \$2.95 to \$9.45 to a range of \$3.75 to \$12.95.)

Thereafter, Silex can use Peoria as a testing ground to determine postwar sales in relation to incomes, urban vs. rural population, and other marketing factors. This information can be then projected on a national scale. The test, of course, will be continued as long as conditions warrant.

Part of the "normal" postwar operation, beginning next year in Peoria, will be resumption of dealer training in the sales points of Silex coffeemakers, and in the technique of promoting them.

- **Need for Salesmanship**—Among other things which the company learned from its Peoria test is that many dealers have lost sight of prewar selling standards. They are so accustomed to have customers hammering on their door for goods that when merchandise remains on the shelves a few days they gripe that it is "unsalable." Some dealers are so accustomed to being without merchandise that they neglect to order it even when it is available.

When dealers were permitted to advertise Silex coffeemakers in the third month of the test, all did so at once. Then they were disappointed because every store did not find customers queued up to buy, and because sales fell off when advertising was discontinued.

The company also found out that display alone won't sell merchandise. Customers are so conditioned to seeing new merchandise tagged "For Display Only," that they often assume it is not for sale even when the sign is missing.

NEW LINE OF RECORDS

Westinghouse dealers, marketing the first radio-phonograph combination the company has ever manufactured, soon will be able to offer their customers a new line of recordings as well.

The records are the product of Artists Records, Inc., Los Angeles. The company was organized recently by Werner Janssen, symphony conductor, with himself as president. First album, "Genesis Suite," recorded by Janssen's symphony with narration by Edward Arnold, will be released Dec. 1. Pressings will be made in Hollywood, Chicago, and New York.

Janssen contemplates a full line of musical selections from hillbilly to symphony. Westinghouse Electric Supply Co. will have exclusive distribution, selling to dealers who hold the Westinghouse franchise.



No. 6. The Puzzle of the Counterfeit Coin

Here are 9 coins and a scale. Eight of the coins are of equal weight — the ninth is counterfeit, weighs less.

The problem: What's the least number of weighings necessary to isolate the counterfeit coin?*

Tricky, this one, but very apropos. For it's quite a trick today to solve some metal turning problems . . . to remove metal more quickly, more economically, in the least number of operations.

The chances are that turning accounts for 25 per cent or more of all machining time in your plant.

There are cases in our files of savings of hundreds of

dollars a month in the manufacture of a single part by the use of Jones & Lamson machines. Our machines are designed specifically for the most efficient use of carbide tools which can remove metal 200 to 500 per cent faster. We have solved many tough cost problems. Solving them is our business.

Be skeptical of the production efficiency of all metal turning equipment in your plant.

Telephone or write for a Jones & Lamson engineer who will be glad to consult with you on all phases of your metal turning problems.

* The answer is 2.



JONES & LAMSON

MACHINE COMPANY

Springfield, Vermont, U.S.A.

Manufacturer of: Universal Turret Lathes • Fay Automatic Lathes • Automatic Double-End Milling and Centering Machines • Automatic Thread Grinders • Optical Comparators • Automatic Opening Threading Dies and Chasers • Ground Thread Flat Rolling Dies.



Now Showing: "The Road to Bedlam"

If that's how you feel, every time you try to work at an old-fashioned, cluttered desk . . . you're headed for a Grade-A psychosis. Detour while there's still time! And now's the time to summon—not the muscular gentleman in the white coat—but that messenger of glad tidings

ART METAL'S "MR. EXPEDITER, O.D."

Yes, this expert "Doctor of Offices" will have good news for you . . . of

a new era in office comfort and efficiency, brought about by modern desks designed as helpful, streamlined tools . . . to help executives and staff accomplish more work, at less cost, with less fatigue. Ask Mr. Expediter to tell you how really modern desks work. And ask him, too, for a copy of his "Manual of Desk Drawer Layout". No charge for the book—or for his services and advice. Simply call your local Art Metal dealer or write Art Metal Construction Co., Jamestown, N.Y.

Makers of

ART METAL STEEL OFFICE EQUIPMENT

POSTINDEX VISIBLE INDEX RECORDS

WABASH FILING SUPPLIES

*a subsidiary company

BALTIMORE • BOSTON • CHICAGO • CINCINNATI • DETROIT • HARTFORD
LOS ANGELES • NEW YORK • PHILADELPHIA • PITTSBURGH • WASHINGTON



SYSTEMATIZED EQUIPMENT AND RECORDS FOR BUSINESS

Real Silk Shift

Always a door-to-door merchant, company opens local shops where its full line, grown far beyond hosiery, can be seen.

After more than a quarter of a century of selling directly to customers in their homes or offices, the Real Silk salesman is now being given a lift with his increasingly burdensome sample case.

Real Silk Hosiery Mills, Inc., has opened its first Realsilk Style Shop in Trenton, N. J. Two more will be opened—in Baltimore and Hagerstown, Md.—within six months. Several others will be added later to make sure the idea is adequately tested.

• **Booths Instead of Counters**—The Trenton shop resembles a specialty store, minus the counters. It has semiprivate booths where the customers can look over Real Silk products, try them on for size, and buy—but not to take home. Orders are forwarded to the company's Indianapolis headquarters, as always, and the goods shipped directly to the customer.

Each of the twelve salesmen in the Trenton area spends a small part of his work-week—possibly less than half a day—in the shop, which will also have a manager and a cashier. Salesmen are encouraged to have customers meet them at the shop during their hours on duty. Since each salesman's territory is exclusive, he gets a commission on all shop sales made to persons living in



Semiprivate booths permit leisurely study of Real Silk's broadened line.

BUSINESS WEEK • Dec. 7, 1946

FIRE SWEEPS OFFICE BUILDING RECORDS DESTROYED

August 31—Fire of unknown origin razed the office building at 110 E. Main Street in the early morning hours today, causing an estimated damage of \$60,000.

Within fifteen minutes of discovery of the flames, the night watchman, three fire companies and arrived on the scene in response to the alarms.

Discussion of the effects of the conflagration, David E. McMahon, this city, president of the Western Company, which occupies the premises, is reported as saying that while the ruined property was covered by insurance, vital blueprints and other filed documents destroyed were invaluable and could not be replaced. Among the records lost in the fire were the plans of the firm's new building, which was to

Don't Let This Happen To You! MICROFILM YOUR FILES NOW!

During the years 1944-1945, the red hand of fire fell across 6200 office buildings, with resultant interior damage totaling \$8,300,000.

Over and above this destruction, however, countless records beyond value were forever lost to the flames.

This loss could have been avoided by micro-filming!

At the cost of a fraction of a cent per item, the Holbrook Microfilming Service can accurately and speedily micro-photograph the contents of entire filing cabinets—in your own plant, if you wish—with a consequent saving to you of storage and filing space of more than 99%!

Because of the small space they require, microfilms may be kept in fireproof, burglarproof vaults, safe from loss or destruction by any cause.

As a double safeguard, the Holbrook Microfilming Service holds a duplicate positive film

for you in its specially-constructed vaults, at no extra charge.

Blueprints, letters and other documents may be reproduced in any quantity and in any size, on very short notice and at small cost.

Easily accessible and cross-indexed for convenience, microfilms can save an enormous amount of time and should result in the freeing of filing personnel for other duties.

Modern executives in increasing numbers are looking to the Holbrook Microfilming Service for complete protection of valuable files, as well as for economy resulting from huge savings in space and personnel.

Let a Holbrook Sales Engineer analyze your filing problem and explain how the Holbrook Microfilming Service can be adapted to your needs, at no obligation to you.

"Insure" your files . . . with microfilm!



Holbrook Microfilming Service, Inc.
Empire State Building, New York 1, N. Y.

DEVOTED EXCLUSIVELY TO MICROFILMING

It Won't be a

WHITE CHRISTMAS

in Industrial Santa Clara County!



**12 months each year men can
work and play... OUTDOORS!**

There's been a lot of talk about California climate. But industrially speaking, Santa Clara County's mild, year 'round temperate climate has a vital bearing upon production—and that's important to every industrial executive

This December, based upon a 32-year record, Santa Clara County's temperature will average 48.2° F. That's just 9.7° less than the mean year 'round temperature. The ground will be free from snow. Workers will arrive at their jobs on time. Outdoor work will continue as usual. And the normal outdoor recreation such as golf, tennis, etc. will continue in stride.

Production records in Santa Clara County average 15% greater than the national average. But figures are secondary to your own experience. Look out the window. How much greater efficiency would your plant attain if this were *NOT* a White Christmas?

WRITE FOR THIS FREE BOOK

Isn't it worth getting ALL the facts about Santa Clara County as your West Coast plant location? Write for "The New Pacific Coast." 36 pages. Factual—and FREE, if you write on your business letterhead.



DEPT. W — SAN JOSE CHAMBER OF COMMERCE • SAN JOSE 23, CALIF.



SANTA CLARA COUNTY

California

The population center of the Pacific Coast

it, regardless of who waits on the customer.

• **Plan's Advantages**—The retail store plan was developed by C. C. Knox, Real Silk's sales manager, along lines suggested by the salesmen themselves. He sees a two-fold advantage in it: Customers can stop in to look at the Real Silk line at their convenience, without waiting for a salesman to call; and they can see the entire line, which is now much too cumbersome for salesmen to carry except by resorting to catalogs to show many items.

Real Silk products have changed radically since the company started with hosiery in 1920. A few years after its founding it branched out into making other garments for women. In prewar years it offered men's and women's wear—ties, lingerie, pajamas, men's robes, gowns, housecoats, and other items—made of both silk and rayon. Now its only silk item is a tie—with a rayon lining.

• **Broadening the Line**—The company does a small amount of private brand manufacturing for other vendors, but most of its sales (over \$12,700,000 last year) come from its own brands, sold by house-to-house canvassers. The line now includes all the prewar merchandise, in rayon and other fabrics, plus women's coats and accessories, men's shirts, and sportswear and rainwear for both men and women. Typical prices: men's hose from 55¢ in cotton to \$1.50 in wool, neckties at \$2, women's slips at \$2.90 to \$4, dresses \$5.95 to \$14.50 and women's suits at about \$50.

At the moment Real Silk is broadening its line still further by adding spe-



C. C. Knox, Real Silk's sales manager, developed the company's new program: retail shops where customers can inspect and order merchandise.

Ad Readership Growing

Companies with rising advertising costs will get a mild lift from a report of the Advertising Research Foundation: Newspaper advertisements are better read today than they were before or during the war.

The foundation offers no reason for the postwar rise. Its summary covers 100 studies of newspaper reading completed since midsummer of 1939. They were published as part of the Continuing Study of Newspaper Reading.

• The comparison, charted in the summary, shows that advertising lost readers during the war. But since V-J Day it has gained more readers than ever, with the exception of women readers of national and local advertising.

Here the box scores for men and women, in median percentage of readership:

	Men		
	Pre-war	War-time	Post-war
Advertising (except classified)	80%	77%	84%
National adv.	53	48	59
Local adv.	74	67	77
Dep't store adv.	39	31	49
Classified adv.	32	40	51
Amusement adv.	44	42	47

Women			
Advertising (except classified)	95%	95%	96%
National adv.	59	62	57
Local adv.	94	93	94
Dep't store adv.	87	80	88
Classified adv.	38	48	51
Amusement adv.	59	59	65

• The summary also points out that the high wartime interest in the editorial page has sagged. Comics, financial pages, sports news, radio features, and society items are regaining the attention they lost during the war.

cialty items, including a two-burner magnesium griddle, an adjustable stand for reading in bed, a household deodorizer, billfolds, cigaret cases, compacts.

Obviously these items, and, in fact, many of the company's regular products, are made for it by other manufacturers. The company has its own factories in Indianapolis, Dalton, Ga., and Durant, Miss.

• **Precedent?**—Knox believes that it may take two years, or even five, to give the Style Shop idea a fair test.

The experiment will be watched with interest by outsiders, who remember that in 1933 another firm well entrenched in house-to-house selling, Fuller Brush Co., opened a chain of retail stores. They were closed four years later, however; Fuller found that its high-quality merchandise fared better with concentrated salesmanship in the prospect's home.

BUSINESS WEEK • Dec. 7, 1946



Necklace Design by Tappan

INDUSTRY'S PRECIOUS METAL

FOLLANSBEE STEELS are precious, too. You don't pay prices based on *scarcity* when you buy Follansbee Steels even though we can't produce all you need. Nor do you pay a precious-metal price for the *high intrinsic value* of Follansbee Cold Finished Strip, Electrical Sheets, or Polished Blue Steels.

Follansbee Steels are still scarce, but Follansbee metallurgical and manufacturing methods assure you the highest quality and most precise physical specifications in the limited quantities available to you.

If we are to increase the supply of Follansbee Steels it is imperative that you keep your scrap moving to the mills regularly. Will you speed up on your scrap disposal methods today?

FOLLANSBEE STEEL CORPORATION

GENERAL OFFICES

PITTSBURGH 30, PA.

GOLD ROLLED STRIP • ELECTRICAL SHEETS & STRIP • CLAD METALS
POLISHED BLUE SHEETS • SEAMLESS TERNE ROLL ROOFING

Sales Offices—New York, Philadelphia, Rochester, Cleveland, Detroit, Milwaukee. Sales Agents—Chicago, Indianapolis, St. Louis, Kansas City, Nashville, Houston, Los Angeles, San Francisco, Seattle; Toronto and Montreal, Canada. Plants—Follansbee, W. Va. and Toronto, O.
★ ★ Warehouses—Pittsburgh, Pa. and Rochester, N. Y. ★ ★



The Udylite Semiautomatic Plating Machine with one operator who merely loads and unloads the racks will turn out as much work in a given time as a battery of still tanks with a number of operators. And it doesn't require a skilled operator either.

Specifically here's what this machine will contribute to your plating operation.

- 1 Provides greater production.
- 2 Greater process control and therefore greater product uniformity.
- 3 Greater flexibility to meet emergencies.
- 4 Significant economies in man-hours, floor space, time and metal consumption.

2456

The new bulletin just off the press will give you complete details. Write for your copy today.



THE **Udylite** CORPORATION

1651 EAST GRAND BLVD.

DETROIT 11, MICHIGAN

REPRESENTATIVES IN ALL PRINCIPAL CITIES

Co-Op Tax Brawl

Kansas proposal to end use of deferred refunds for new-money needs is highlight of fight on taxation exemption.

The running fight to tax cooperatives is shaping up into a real brawl that will enliven the 1947 legislative scene in several state capitols.

A repeat-performance battle is likely in Washington, D. C., too. The National Tax Equity Assn. will spearhead a drive there to remove co-op tax exemption. A full-dress hearing before the House Ways & Means Committee may come in February. Earlier this year the association lost to the co-ops on the issue (BW—Apr. 27 '46, p74).

As a result of that Washington defeat, state laws have come into focus as the spot to draw the taxation issue.

• **Strategy in Kansas**—The bitterest outbreak is expected at Topeka, Kan., with a ding-dong struggle over a proposal co-op leaders consider a "death sentence" for cooperative associations.

The proposal comes from the Kansas



LIGHT ON ITS OWN

A Christmas tree that glows in the dark strikes a festive note in home Yule trim. The decorator coats his ornaments—or sprays a whole tree—with fluorescent paints. Under an ultraviolet "blacklight" lamp, tree and ornaments shine in luminescent colors. Produced by Stroblite Corp., 35 West 52nd St., New York, six colors of paint sell for \$4, the lamp for \$18.

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\$18.
1946



Photograph courtesy of Dictaphone Corp.

**JOHNSON CONTROL
OF TEMPERATURE**

serves
Mr. Tom Connors
Vice President, 20th Century-Fox Film Corp.

The Stage Is Set by **CONTROL**

Everything in the office of Mr. Tom Connors of 20th Century-Fox Films denotes control: tele-

phone, Dictaphone, electric light switch, clock. All, in a way, indicate control of distance, time or physical forces. On the wall, at the edge of the window drape, the Johnson *thermostat* controls the temperature of this individual room, independent of any other room in the building. It is the "nerve-end" of a skyscraper's "respiratory system."

Johnson individual room control of temperatures creates made-to-measure environment for thinking, sets the stage for precise judgment and quick action. All over the continent—in great office buildings, hospitals, schools, hotels, theaters, factories, and large residences—Johnson Automatic Temperature Control Systems are the "brain" of heating and air conditioning installations. They produce economy, comfort and convenience in a busy world, by conserving human energy and fuel.

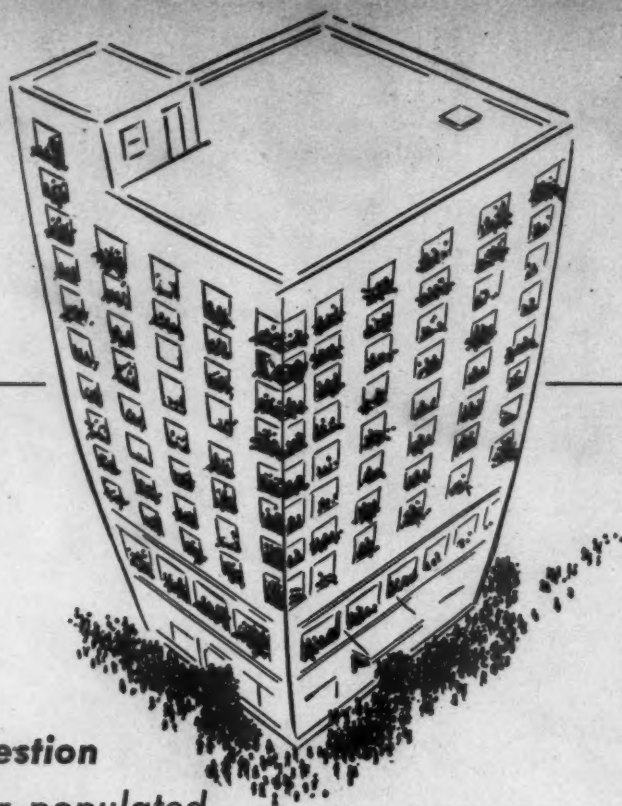
Consult a Johnson engineer from a nearby branch office for the answer to *your* temperature control problem, in either existing or new buildings. There is no obligation, of course. Johnson Service Company, Milwaukee 2, Wisconsin. Direct Branch Offices in Principal Cities.



SEE OUR EXHIBIT
BOOTHS 527-8



JOHNSON *Automatic Temperature and*
Air Conditioning **CONTROL**
DESIGN • MANUFACTURE • INSTALLATION • SINCE 1885



a suggestion for over-populated buildings

• Many business firms (like families) have had to "double up" . . . crowd extra personnel into offices already cramped because of inability to rent additional space.

Many apartment buildings are housing twice the number of residents for which they were planned . . . hotels are using every foot of available space to accommodate the unprecedented flood of travelers, sightseers and harried home-hunters.

In such over-populated buildings, passenger traffic may have become too heavy to be handled satisfactorily by the original elevator equipment.

There is a proven remedy for this condition. It is Otis Elevator Modernization. Hundreds of outdated or in-

adequate elevator installations have been changed over, and the service improved, to meet the greater demand of present conditions.

In many office buildings a change-over to Otis Peak-Period Control has made possible faster and more efficient elevator service — in a number of cases even with fewer elevators.

An Otis survey of your elevator needs is the first step. For the finest in vertical transportation tomorrow, call Otis today.



N.A.M. to Join Fight

With friends and foes of the cooperative movement joining the co-op tax fray, the National Assn. of Manufacturers has let it be known that it is getting ready to take a stand.

• While N.A.M. hasn't said which way it will go, the Cooperative News Service, spokesman for the Cooperative League of the U.S.A., has circulated a statement from an N.A.M. source. According to the news service, Morris Sayre of N.A.M.'s agricultural policy committee told the Indiana State Grange that "no justification is found for taxing at the source patronage refunds. . . ."

The news service saw Sayre as neatly dodging the direct question of deferred dividends. The N.A.M. representative was quoted as saying that reserves "available for, but not distributed to, patrons . . . should be taxed as earnings." The news service apparently wondered what "distributed" meant—just cash payments, or did it include deferred dividends earmarked for members?

Legislative Council as a report from its special committee on cooperatives. It would cut off the capital which co-ops now obtain in the form of deferred refunds to patrons.

Ohio, Indiana, Illinois, Texas, Wisconsin, and Virginia also are likely to see co-op tax measures take the spotlight in their legislative arenas.

• **Would Bring Out Cash**—The Kansas proposal, which does not wear National Tax Equity Assn. label, would set a pattern for state legislation that could win N.T.E.A.'s goal without further federal law-making. The committee's report, in substance, offers a three-point recommendation that would:

(1) Prohibit the practice of earmarking reserves for members as deferred patronage refunds. This device enables co-ops to hold their reserves tax-free for capital use; it provides co-ops with the larger part of their new money. The Kansas proposal thus would force co-ops to pay out earnings in cash and pay taxes on reserves under the present regulations of the U. S. Bureau of Internal Revenue.

(2) Limit total tax exemption claims to associations made up of "natural" persons, with at least 90% of them farmers. Thus the giant central buying and selling co-ops, which act for local cooperative corporations, would become a plain target for the tax collector.

(3) Require all co-ops doing business

Everything in Piping . . . for Food Packing Plants, for example

ONE
CRANE CO. SUPPLY
CRANE CO. QUALITY
STANDARD OF QUALITY

Now you see tomatoes . . . now shiny bottles of spicy ketchup. Now you see carrots . . . now countless tins of wholesome baby food. That's the way it goes in modern food packing plants. Fruits, vegetables, meats and seafood in an endless parade . . . to give zest, flavor, and variety to American meals.

It's easy to see the part that continuous piping processes play in mass-producing prepared foods. There's piping everywhere, much as in textile, petroleum, chemical, and all other process industries.

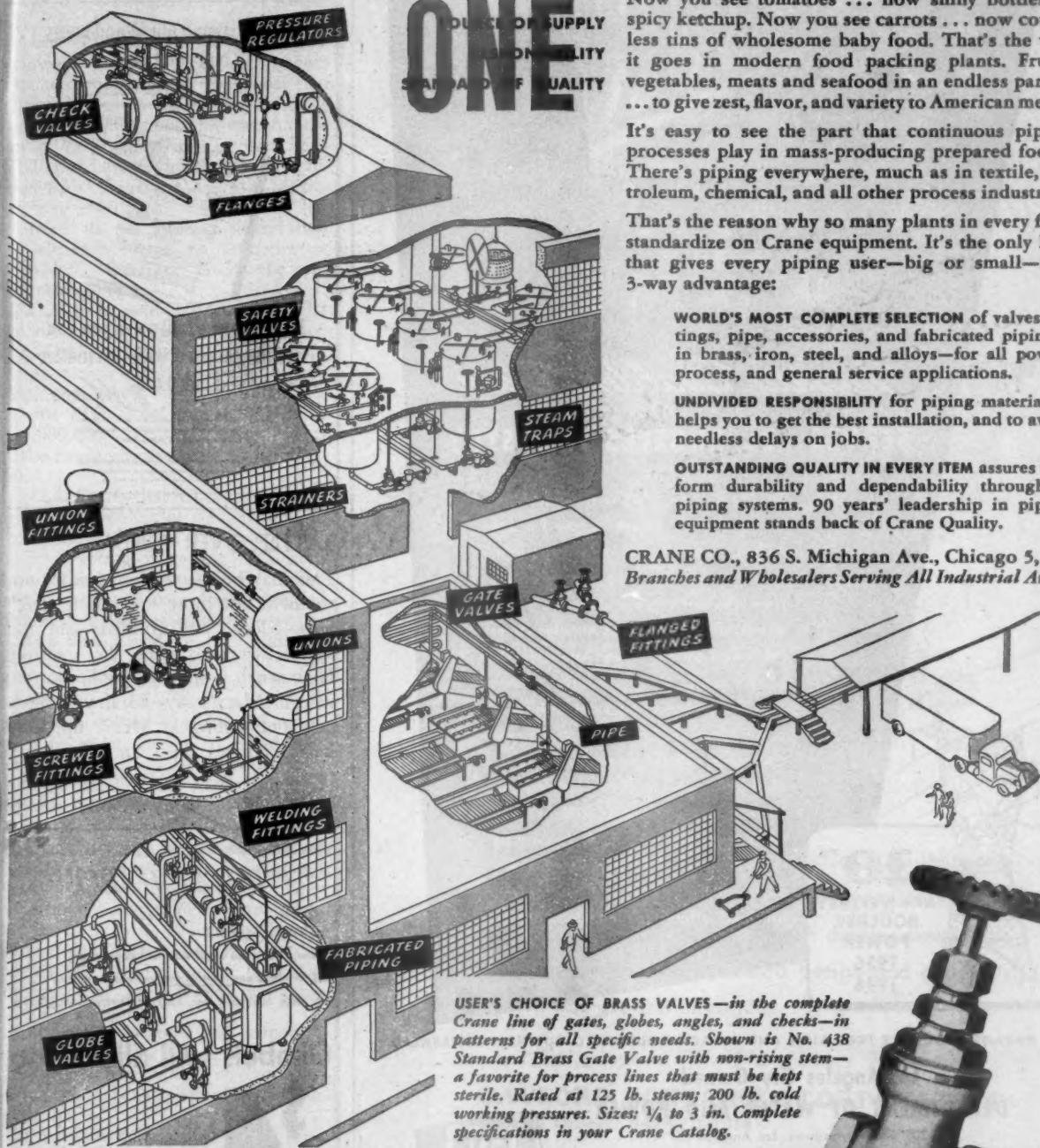
That's the reason why so many plants in every field standardize on Crane equipment. It's the only line that gives every piping user—big or small—this 3-way advantage:

WORLD'S MOST COMPLETE SELECTION of valves, fittings, pipe, accessories, and fabricated piping—in brass, iron, steel, and alloys—for all power, process, and general service applications.

UNDIVIDED RESPONSIBILITY for piping materials—helps you to get the best installation, and to avoid needless delays on jobs.

OUTSTANDING QUALITY IN EVERY ITEM assures uniform durability and dependability throughout piping systems. 90 years' leadership in piping equipment stands back of Crane Quality.

CRANE CO., 836 S. Michigan Ave., Chicago 5, Ill.
Branches and Wholesalers Serving All Industrial Areas



USER'S CHOICE OF BRASS VALVES—in the complete Crane line of gates, globes, angles, and checks—in patterns for all specific needs. Shown is No. 438 Standard Brass Gate Valve with non-rising stem—a favorite for process lines that must be kept sterile. Rated at 125 lb. steam; 200 lb. cold working pressures. Sizes: 1/4 to 3 in. Complete specifications in your Crane Catalog.

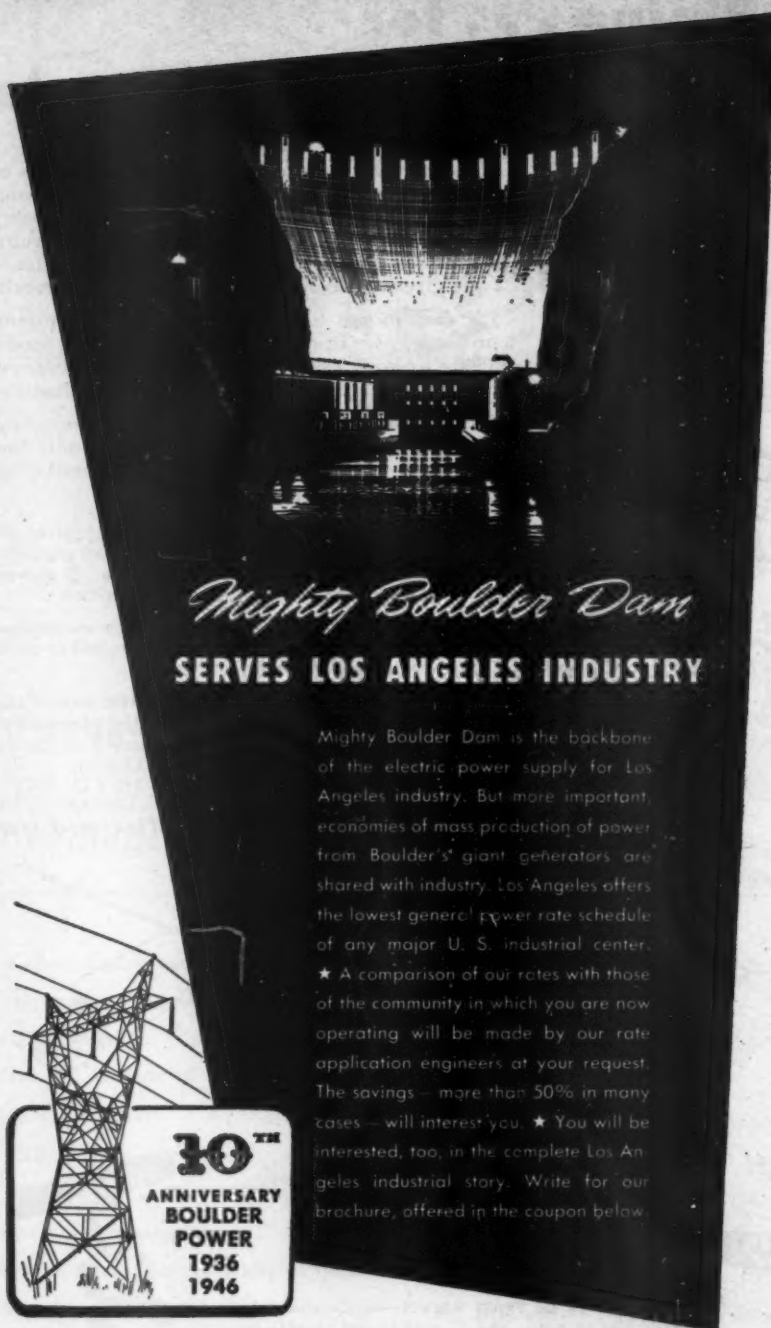


EVERYTHING FROM . . .

VALVES • FITTINGS
PIPE • PLUMBING
HEATING • PUMPS

CRANE

FOR EVERY PIPING SYSTEM




Mighty Boulder Dam

SERVES LOS ANGELES INDUSTRY

Mighty Boulder Dam is the backbone of the electric power supply for Los Angeles industry. But more important, economies of mass production of power from Boulder's giant generators are shared with industry. Los Angeles offers the lowest general power rate schedule of any major U. S. industrial center.

★ A comparison of our rates with those of the community in which you are now operating will be made by our rate application engineers at your request. The savings—more than 50% in many cases—will interest you. ★ You will be interested, too, in the complete Los Angeles industrial story. Write for our brochure, offered in the coupon below.



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ANNIVERSARY
BOULDER
POWER
1936
1946

40-PAGE BROCHURE FREE. SIGN AND ATTACH COUPON TO BUSINESS LETTERHEAD

Los Angeles City-Owned DEPARTMENT OF WATER AND POWER

207 South Broadway, Los Angeles 12

"Serving the water and power needs of 1,805,687 citizens"

NAME _____
ADDRESS _____
CITY & ZONE _____

Los Angeles



IN THE WEST



IN YOUR INDUSTRIAL FUTURE



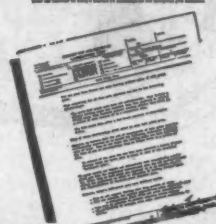
R.W.

in Kansas to qualify under Kansas laws which would be rewritten to include points 1 and 2.

• **Farmers May March**—National co-op leaders are predicting that cooperative-minded Kansas farmers will again troop

Do you own a horse-and-buggy ball-point pen?

Compare your old fountain pen to the ball-point pen. A ball-point pen writes like a fountain pen, but it never dries up. It is the only pen that writes on any surface. It is the only pen that writes on any surface. It is the only pen that writes on any surface.



If you have a ball-point pen you are not satisfied with—no matter where you bought it—Macy's... *Macy's...*

WILL take in hand 50¢ your old 50¢ or more for 50¢ and allow you 50¢ for a new one. **WILL** give you a new one for 50¢ or more.

WILL give you a new one for 50¢ or more. **WILL** give you a new one for 50¢ or more. **WILL** give you a new one for 50¢ or more.

BATTLE OVER PENS

This may be the season of peace and goodwill but those squabbling neighbors—Macy's and Gimbel's—are at it again. Now it's over the question: How much is an "old" ball-point pen worth? Macy's says \$3 if you buy a new one selling at \$12.50 up; Gimbel's retaliates with an offer of \$4 for ANY pen—ball or otherwise—against any pen retailing for \$8 up.

when Johnny-come-lately tries to put Johnny-on-the-spot on the spot, **WHAT HAPPENS?**

here's what happens!

Gimbel's, first in the world with the ball point pen, will take back any fountain pen, purchased any time any place, that's halt, lame, leaky, or otherwise unsatisfactory

Gimbel's will allow you

\$4

on your fountain pen, no matter what you paid for it, toward any Gimbel's pen worth \$8.00 or more

Read the story of Gimbel's "pen war" in the Los Angeles Times. It is the story of a battle between two of the nation's great department stores. Gimbel's, first in the world with the ball point pen, has now declared war on the fountain pen. It is the story of a battle between two of the nation's great department stores. Gimbel's, first in the world with the ball point pen, has now declared war on the fountain pen. It is the story of a battle between two of the nation's great department stores.

to Topeka to fight such a measure. A similar march forestalled enactment of another tax proposal and led legislators to toss the problem to the Legislative Council. The resulting special study produced the present proposal.

F. R. Olmsted, general counsel of Consumers Cooperative Assn. of Kansas City, Mo., is likely to pilot the fight to keep deferred patronage payments.

• **Obvious Target**—While C.C.A. goes unnamed in the report, the association is the obvious target of the council's committee. Singled out for special mention is "a cooperative that had been able to purchase a refinery and pay completely for that purchase out of the first year's earnings. . . ." C.C.A. has expanded its gas and oil distribution and currently owns oil refineries at Scottsbluff, Neb., and Coffeyville and Phillipsburg, Kan.

• **C.C.A. to Expand**—Undaunted by the legislative storm its growth has whipped up, C.C.A. currently is planning a four-fold expansion of its distribution in the middle and lower Missouri Valley. Its goal for 1951 is an annual volume of \$104,000,000. C.C.A.'s range-finders say the target requires doubled membership.

C.C.A. figures that it will need financing to the amount of \$40,000,000 to accomplish its purpose. The co-op, however, is counting on getting 75% from its member associations largely in the form of share and loan capital, deferred refunds, and patrons' equity reserves.

• **Co-op Tax Line**—For the Washington battle, the National Assn. of Cooperatives, spokesman for both farmer and consumer co-ops, has retreated to a tax-exemption line it believes it can defend. In effect, it has conceded that earnings turned directly into reserves (not earmarked as deferred refunds to members) are taxable as income.

This is the situation now for the majority of co-ops. But about 40% of U. S. co-ops (mostly the smaller ones) have claimed total tax exemption. They are farmers' marketing co-ops given freedom from taxes under the Capper-Volstead definition. The co-op association has told members of the incoming Congress that they should withdraw this total exemption.

But that retreat does not relinquish the exemption from federal income and excess-profits taxes which any cooperative may claim for its deferred dividends to patrons.

• **Farm Bureau's Stake**—Co-op war cries will hit their highest notes, meanwhile, at the national convention of the American Farm Bureau Federation when it assembles next week in San Francisco. The Farm Bureau has a sizable stake in the welfare of Corn Belt co-ops, and the leaders from Ohio, Indiana, and Illinois are convention-bound with the main thought of stopping N.T.E.A.



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PRODUCTION

Progress in Power Engineering

Smaller, lighter, more efficient units promised by three recent developments: a pressure exchanger to boost horsepower, a new lightweight gas turbine, and an ash-eliminating furnace.

More efficient, lower-cost power plants are in prospect when research in gas turbines and steam boilers, described this week by power experts at the annual meeting of the American Society of Mechanical Engineers, reaches the commercial stage.

Significant developments, if the words of the experts are to be taken at face value, are:

(1) Brown Boveri's (Switzerland) new 4,000-hp. locomotive which includes a new device—called Comprex—said to add as much as 50% to gas turbine output;

(2) Westinghouse's lightweight gas turbine; and

(3) A radically new furnace for power stations developed by Babcock & Wilcox.

• **High-Pressure Air**—Brown Boveri's Comprex, still in the developmental stage, is a pressure exchanger driven from the main rotor shaft. The rotating device is cylindrical and fitted with helical longitudinal passages. Air is taken off the gas-turbine compressor and fed into the rotating cylinder. A portion of the air, meeting a small valve, builds up pressure much in the way a hydraulic ram does. This small portion of higher-pressure air is directed through the combustion chamber and

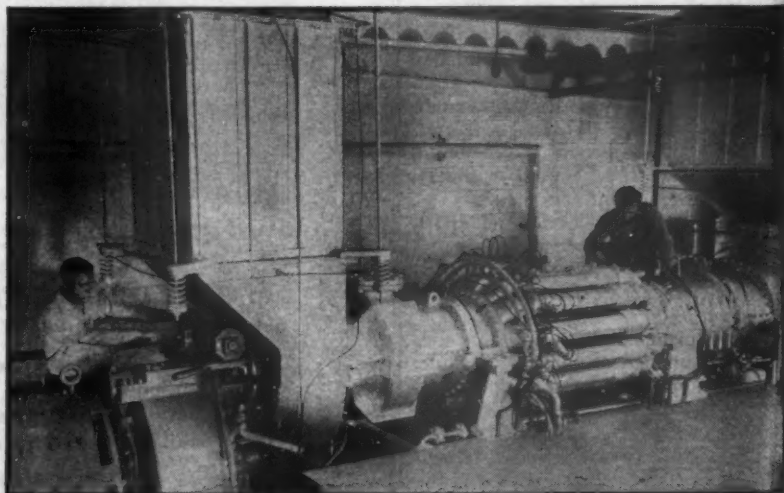
thence to an auxiliary turbine which helps drive the gas-turbine unit.

The remainder of the air, after being heated in the combustion chamber, mixes with the exhaust air from the auxiliary turbine and is then directed into the main-drive turbine.

According to Brown Boveri engineers, a compressor-turbine combination now in regular service in a 2,500-hp. locomotive in France produces 4,000 hp. when fitted with a Comprex unit. The device adds only 4 ft. to the power plant, making it 44 ft. long over-all. Commercial application, however, may be limited to locomotive and ship propulsion where a premium can be paid for compactness.

• **Lightweight Gas Turbine**—With an eye toward the day when gas turbines will be commercially important in the chemical process and electric power fields, engineers of the Westinghouse Electric Corp. discussed their 2,000-hp. unit. This was built primarily for full-scale testing of latest materials; construction is based on war-born aviation and metallurgical research. The rotor of the turbine, for example, is the largest forging made to date from stabilized 19-9 stainless steel. Blades are precision-cast of cobalt-chromium-tungsten alloy.

Significance of the new development



Details of Westinghouse's new 2,000-hp. stationary gas turbine—the result of new "materials plus war-born design technique—were unveiled this week.

Fighting Russian Fires

Five tons of carbon dioxide, stored under pressure in 186 cylinders, will provide fire protection for the new 90,000-kilovolt-ampere generators at Russia's huge Dnieprostroi Dam. Carrying liquid CO₂ under 850 p.s.i. pressure, the cylinders will be manifolded together and connected by piping to each of the nine generators. Although the system can be operated manually, automatic operation will also be provided by the use of thermostatic controls.

• There are two systems of piping lead into each generator. The first, from 62 tanks, provides an initial blast of carbon dioxide to smother any fire. Since there is a ten-minute lag between the time of fire detection and the time the generator stops, additional gas is supplied in order to compensate for leakage and air infiltration. For this purpose 31 tanks are used.

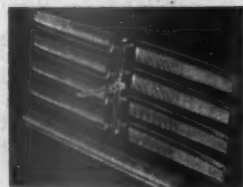
To guard against possible fire in two generators at once, and for protection while discharged tanks are being refilled, a duplicate reserve cylinder bank of 93 units is available, making a total of 186 units.

• The fire protection equipment, furnished by Walter Kidde & Co., will be installed by the Russians.

lies in the fact that this is the first application of high-speed, lightweight construction, typical of aviation turbines for jet planes, to stationary power practice. Both Elliott and Allis-Chalmers (BW-Apr.13'46,p54) follow more conservative earlier practices in stationary designs but are building lighter-weight coal-fired gas turbines for railroad use (BW-Aug.3'46,p44). It is said that basic elements of the Westinghouse turbine can be expanded into sizes of particular interest to power engineers and ship operators.

• **Quick Starting**—Unlike most large-horsepower units, this gas turbine is built on pivoted supports. The pivots provide for expansion of the mechanism during rapid temperature changes from 750 F to 1,350 F. This allows quick starting from dead cold to full speed in a minute and a half, and change from no load to full load practically instantaneously. Both of these characteristics are of particular value in locomotives and in certain process applications.

The unit is so compact that it is reported two can be placed side by side in a standard locomotive cab, occu-



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Television via Light Beam

Television pictures and accompanying sound were transmitted last week by a beam of light instead of conventional radio waves. The new technique, called Photovision, was demonstrated before the American Institute of Electrical Engineers in Washington, D. C., by the inventor, Dr. Allen B. Du Mont.

• **Spot of Light**—A special cathode-ray tube replaces the antenna at the transmitter (right). The tube is designed to produce a bright spot of light. Its brilliance can be varied to any degree, between full-on and full-off, 5 million times a second. Picture signals, fed to the cathode-ray tube by television camera and amplifiers, vary the intensity of the light beam. In effect, the television signals are placed on a light-beam carrier with a frequency approximating 600,000 megacycles—in the visible spectrum of light. (Present television systems use a radio frequency of 60 megacycles.)

At the receiving station (left), the antenna is replaced by a sensitive phototube. This tube converts the light fluctuations into varying electrical signals exactly similar to those flowing through a receiving antenna. From this point on, conventional television receiver equipment is used to reproduce picture and sound. Picture quality obtained over the light beam is reportedly equivalent to that obtained by radio.

• **Network Possibilities**—Transmission over light waves, instead of through coaxial cable, offers possi-

bilities of reducing relaying costs of network television. The distance covered in the demonstration was only 35 ft. Plans call for a demonstration over a distance of 5 mi. in the near future.

With 5-mi. spacing between relaying stations, Du Mont's Dr. T. T. Goldsmith stated, New York and Washington could be linked by a series of such stations at a cost not exceeding \$30,000. This would appear to be an underestimate, if building and site costs are taken into account.

One possibility claimed for the light-beam system by Du Mont in addition to network use is short distance relaying of television programs from scene-of-action to transmitter. Another is transmission of programs from a main transmitter in complete secrecy to motion picture theaters contracting and paying for such service.

• **Limitations**—General broadcasting over light beams is not contemplated. The system inherently requires concentration of light into a beam directed accurately at the receiving phototube. One transmitting lens system is therefore required for each receiver.

The Photovision system is an outgrowth of an invention made by Dr. Du Mont in 1931. A patent was issued in December, 1934. Further developments are expected to make the system applicable to transmission of color television, and suitable for operation even in fog.

pying together only 25 ft. of length. This can result in road locomotive types considerably shorter than modern, high-power diesels.

• **Whirling Furnace**—By whirling a mixture of crushed coal and air at very

high speed in a radically new furnace, cylindrical in shape, Babcock & Wilcox Co. engineers have found that more than 80% of the ash content of low-grade midwestern coal can be "slagged out" before the products of combustion

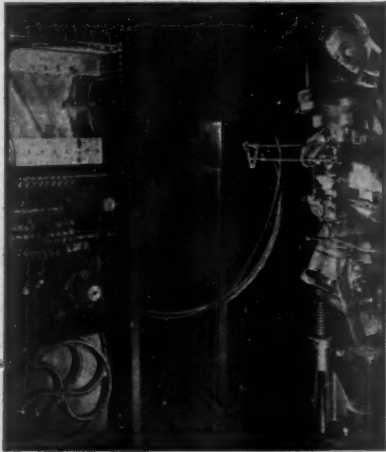
enter the boiler itself. The cyclone furnace, after a year of development, deals a body blow to two great problems of firing large power units: slag formation on boiler tubes, and the discharge of solid particles from power plant stacks.

The furnace uses crushed coal (passing through a $\frac{1}{8}$ -in. screen) instead of the pulverized coal used in most large units. Ash from the whirling coal forms a slag coating over the interior furnace surface, and is drained off as a liquid. Tests reportedly show that only 7.5% of the ash in the coal goes out the stack.

• **High Speed**—The new furnace is 8 ft. in diameter and about 10 ft. long. It can burn more than ten tons of coal per hour. This is equivalent to 180,000 lb. of steam per hour, or about 18,000 kw. of electric power.

Because bulky pulverizing equipment and ash catchers can be eliminated, the B. & W. furnace offers the added possibility of smaller Boiler houses and considerable saving in building expense.

The new furnace can be adapted to boilers now in service. This is being done experimentally in the Calumet station of Commonwealth Edison Co., Chicago.



FOR STRESS AND STRAIN

Technicians at Ethyl Laboratories, Detroit, have had considerably more success with hills than did Mahomet. They, in effect, have brought continuous stretches of mountain highway indoors for engine testing. It's all done with mechanical controls (left) which are actuated by a "player piano roll." Perforations in the roll result in five variations of load to simulate grades of differing steepness, and a changing succession of 20 speeds. By rearranging perforations, the technicians can create virtually any type of road for test-making purposes.

The Tale of a SALE



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So there... in the store, Mr. Product Seller, If your product's good, let your package tell her!



* National surveys have shown that women—who buy $\frac{3}{4}$ of all goods sold at retail—also make $\frac{3}{4}$ of their buying decisions at the point-of-sale—making selections, *on impulse*, from articles they SEE! Hence *the appearance of your package* is a vital selling factor.

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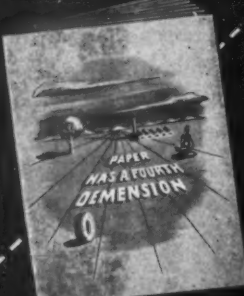
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NEW PRODUCTS

Perpetual Pencil

A sectional pencil, renewable by means of a glue-coated dowel and socket, is being introduced by Moor & Monroe, Inc., Statler Office Bldg., Boston, 16. The manufacturers assert that the pencil can be renewed to original length by moistening the dowel end of a new section and inserting it in the original pencil.

Sizeable savings are claimed for the self-perpetuating pencil, because lengths too short for efficient writing need not

noise that would make current receivers useless even with the most advanced noise limiters.

The code signal received by the pulse detector is used to control the action of a local oscillator which generates a clear signal free of background noise. Thus, the sound heard by the listener is not an amplification of the signal received, but a sound generated simultaneously with the signal.

Availability: deliveries beginning January, 1947.

Expendable Filters

Ten sizes in three new models of expendable cartridge filters are in production at Bowser, Inc., Fort Wayne, Ind. The filters contain replaceable, resin-impregnated, cellulose elements which are said to remove particles of one micron size from liquids of viscosities as high as 600 S.S.U. The cartridges remain completely neutral and will not remove additives or inhibitors, according to the manufacturer. Filtering areas from 28.8 sq. in. to 100 sq. ft. are said to give filtering capacities from $\frac{1}{2}$ gal. to 300 gal. per hour for 50-60 S.S.U. oil.

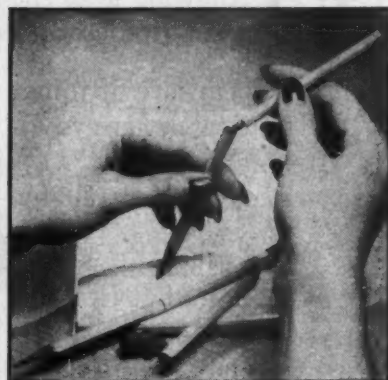
All units are equipped with vent and drain valves and bolted covers for cleaning and for convenience in replacing the expendable cartridges.

Availability: delivery in 22 weeks.

Sealed Beam Spot

A sealed beam spotlight lamp developed for marine and automotive use has been introduced by Westinghouse Electric Corp., Bloomfield, N. J. The lamp is asserted to be four times more powerful than a sealed beam headlamp, having a range of one-half mile.

A tungsten filament in a sealed parabolic reflector provides the light. Stray light is eliminated by a parasol-shape filament shield, preventing glare in the area between the observer and the ob-



be discarded. The pencil is of hexagonal shape, uses a slip-on eraser, and is furnished in standard degrees of lead.

Availability: deliveries within five months.

Steel Skids

All-steel skid platforms for use with hand and electric lift trucks have been placed on the market by Market Forge Co., 80 Garvey St., Everett, Mass. Deck panels of high-tensile-strength, medium-gage steel provide a continuous platform surface. The decking is welded to Z-bars, and these in turn are welded to bar-steel legs.

Advantages claimed are longer life, decreased weight, and increased strength. The platforms are available in any required size and for any specified lift truck. They are supplied in galvanized or stainless steel or in aluminum.

Availability: delivery in six to eight weeks.

Static Eliminator

A "pulse detector," designed to assure radio code reception free from noise and static, is announced by Electronic Laboratories, Inc., 120 W. New York St., Indianapolis. According to the manufacturer, the device is capable of detecting a code signal reliably through



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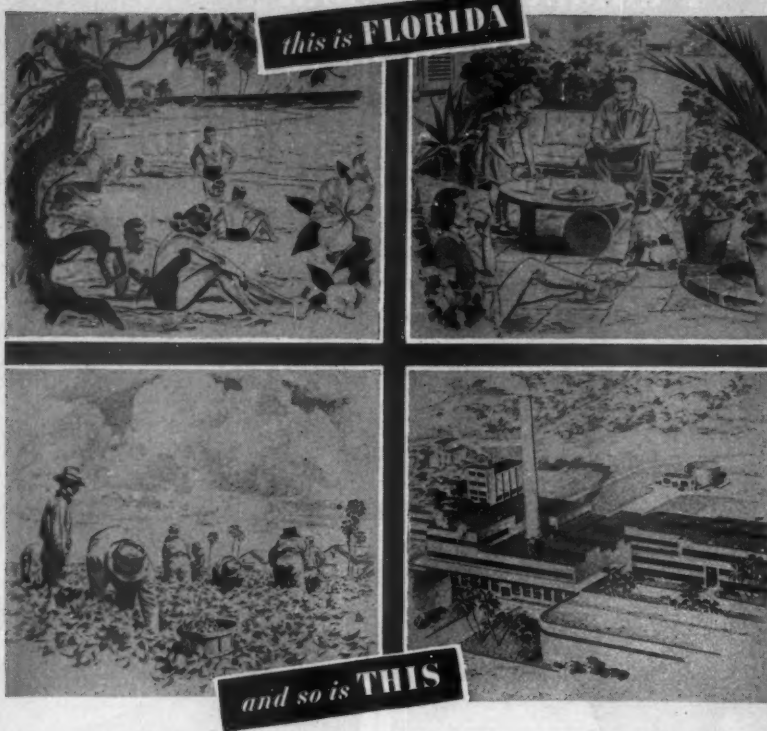
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ject being illuminated, according to the manufacturer.

Availability: lamp in limited production.

Tiny Furnace

A suitcase-size furnace, reportedly capable of heating 2½ rooms, is the newest offering of Stewart-Warner Corp., Indianapolis. An outgrowth of the company's wartime development of aircraft heating, the South Wind Midget Furnace uses manufactured, natural, or bottled gas.

The unit, which measures 14x30x9½ in., can be recessed in a wall between rooms, in or under the floor, in the ceiling, or in any place accessible by short



ducts to the rooms to be heated. Individual thermostats control each heater.

Made of stainless steel, the furnace can be installed by one man, it is said. Safety features reportedly provide positive protection against fire and asphyxiation. The unit is approved by the American Gas Assn.

Availability: deliveries beginning March, 1947.

Plastic That Filters

"Special U.V.A. Plexiglas" is the name of a new transparent plastic said to filter out ultraviolet radiations. Produced by Rohm & Haas Co., 222 W. Washington Square, Philadelphia, the new material is expected to find applications in aircraft inclosures, bus tops, sun glasses, and welding goggles.

The manufacturers state that the plastic sheets are shatter-resistant and are unaffected by salt spray. The ultraviolet absorbing quality is said to improve with age, without affecting the optical qualities of the material. Sheets are available in sizes ranging from 6x12 in. to 67x79 in., and in thicknesses from

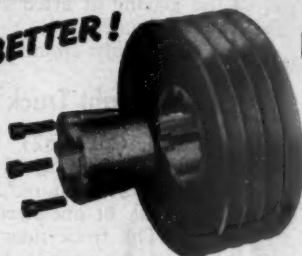


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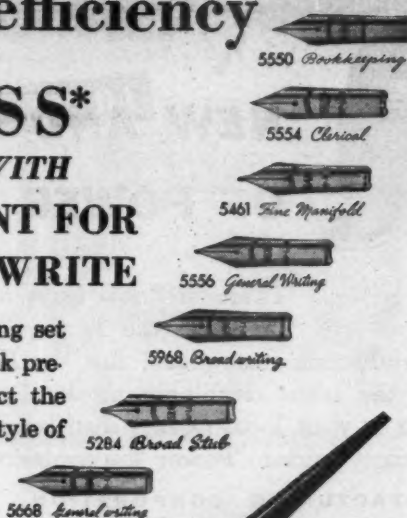
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0.06 in. to 2.0 in. The material can be worked with wood or metalworking tools and can be formed by softening with heat.

Availability: immediate delivery.

Pipe Leak Clamp

A new stainless steel pipe-leak clamp has been announced by Marman Products Co., 940 W. Redondo Blvd., Inglewood, Calif. The clamp is said to withstand pressures exceeding 240 lb. p.s.i.

It consists of a pad (resistant to gas, oil, and water) which covers the leak, and an annealed backing plate. Continuous band-type stainless steel clamps are placed over the pad and plate to hold them in place.

Corrosion resistance and high tensile strength are claimed for the clamp. The steel clamps come in sizes from $\frac{1}{4}$ in. to more than 12 in., and each is adjustable. The necessity for keeping large stocks of different clamp sizes and the making of fitted clamps is said to be eliminated.

Availability: immediate delivery.

Lightweight Truck

Aerol Co., 1823 E. Washington Blvd., Los Angeles 21, is manufacturing an all-aluminum hand truck, the Universal, of one-piece cast aluminum alloy. The truck rides on two rubber-tired aluminum wheels. Load capacity is 2,400 lb.

Weighing 100 lb., the Universal has a 6-in. concave bed over an X-channel frame. The toe plate is alloy steel. Patented Handsaver grips are said to protect the operator's hands and serve as legs when the truck is in a horizontal position.

Availability: delivery in 30 days.

Spud Harvester

Food Machinery Corp., San Jose 5, Calif., announces production of the John Bean Potato Harvester, a new machine to clean and bag potatoes as they are dug. The machine is used in conjunction with a mechanical digger. It is said to be capable of harvesting more than 300 bu. per hour, the equivalent of 15 hand workers. A crew of three or





P R E S E N T I N G

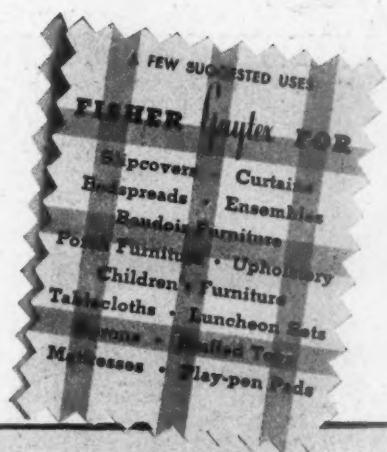
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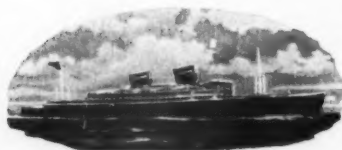
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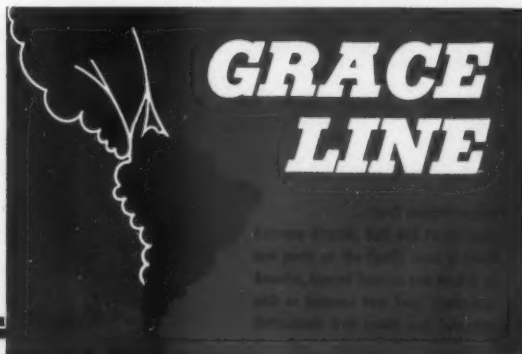
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and complete conveniences while providing shippers with express-speed service at all times.



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four, plus a tractor driver, is used to operate the machine.

The harvester receives potatoes from the digger. By means of rubber-covered rollers, vines and weeds are removed. Small stones and loose dirt are removed by the cleaning rollers. About three-fourths of all stones are removed automatically, the remaining ones requiring hand picking. A rotary bagging device handles bags up to 100-lb. capacity, it is said.

Built of electric welded steel, the harvester is mounted on adjustable axles which permit variation of wheel spacing for oddly spaced rows. Power for the unit is a single-cylinder engine which is reported to furnish 6.8 hp. at 1,400 r.p.m., or 9.2 hp. at 2,200 r.p.m.

Availability: deliveries beginning early Spring, 1947.

Venetian Blind Cleaner

A new tool to clean, wax, or dust venetian blinds is announced by Warren Venetian Blind Cleaner Co., 103 W. 5th St., Pittsburg, Kan. Made of polished aluminum and walnut, the device consists of a cleaning wheel and a driving wheel, belted together. The cleaning wheel is equipped with removable pads between which the slat is placed. As the cleaner is moved along the slat, the drive wheel causes the cleaning wheel to rotate, cleaning both sides of the slat.

The manufacturers claim that the device will clean an average size venetian blind in ten minutes, including the area behind the straps.

Availability: immediate delivery.

Collapsible Wheelbarrow

A wheelbarrow for home use is announced by Palmer Mfg. Co., 3115 Clinton Rd., Cleveland. Newest feature is the inclusion of hinged sides which fold down to form a flat surface for carrying oversized loads. The barrow is finished in baked enamel, weighs 27 lb.

Availability: immediate delivery.



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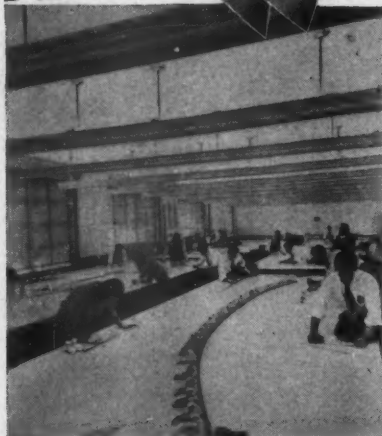
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LABOR

Back-Wage Limit Contested

Ohio union sues Alcoa for portal-to-portal pay and damages covering six years despite state's three-year limitation. Next Congress will be asked to adopt federal restriction.

When Cleveland employees recently sued the Aluminum Co. of America for \$8 million in portal-to-portal back pay and damages, the action held far more than surface significance for management.

Despite Ohio's three-year statute of limitations on employee wage suits (table, page 77), the workers asked recovery of back pay for a six-year period, from Nov. 21, 1940. Their objective was a new and important challenge of the right of a state to impose special limits on suits filed under the Fair Labor Standards Act.

Attorneys for C.I.O.'s Mine, Mill & Smelter Workers Union filed the suit in federal district court. It asked \$4 mil-

lion in accumulated portal-to-portal pay and another \$4 million in liquidated damages allowed under the 1938 wage-hour law. To that extent the Alcoa action paralleled a flood of other back-wage suits (BW—Nov. 23 '46, p102).

• **Discriminatory?**—But, as in many other states since 1938, Ohio's statute of limitations has been amended in recent years to limit employer liability under federal laws. In 1938 the Ohio law governing wage suits by employees set a six-year limit. Subsequently, that statute of limitations was halved, but the limit for other classifications of civil suits was kept at the former six years.

The suit against Alcoa challenges as "discriminatory and illegal" any state



SOMETHING VENTURED, NOTHING GAINED

Milwaukee cops, deputized as sheriffs to serve outside city limits, kept festivities (above) fairly well in hand last week when U.A.W. (C.I.O.) Local 248 was host at an afternoon's picket demonstration at Allis-Chalmers' plant gate. Plans were for an all-Milwaukee C.I.O. show; 20,000 were invited, about 4,000 appeared. Most came from Nash-Kelvinator's Seaman Body plant and the party ended with half a dozen hospitalized. From a union viewpoint, the show flopped. The object was to discourage 30% of the A.C. force which had heeded a back-to-work call; two days later they were still working.

State Wage-Suit Limits

State statutes of limitations govern employee wage suits under the Fair Labor Standards Act of 1938. Because of this, business groups in 13 states—predominantly agricultural—successfully sought to reduce their liability in wage-hour cases by asking state legislatures to amend laws covering retroactive liability.

The limitations (in years) by states when the wage-hour act went into effect and in 1945 are:

1938		1945		1938		1945	
Ala.	6	1	Mont.	2	2		
Ariz.	1	1	Neb.	4	4		
Ark.	5	5	Nev.	6	2		
Calif.	3	3	N. H.	6	6		
Colo.	6	1	N. J.	6	6		
Conn.	3	3	N. M.	4	4		
Del.	3	3	N. Y.	6	6		
D. of C.	3	3	N. C.	3	3		
Fla.	3	1	N. D.	6	1		
Ga.	6	2	Ohio	6	3		
Idaho	3	3	Okla.	3	3		
Ill.	5	5	Ore.	6	3½		
Ind.	6	6	Pa.	6	6		
Iowa	5	½	R. I.	6	6		
Kan.	3	3	S. C.	6	1½		
Ky.	5	5	S. D.	6	6		
La.	1	1	Tenn.	6	3		
Me.	6	6	Tex.	2	2		
Md.	12	5	Utah	4	4		
Mass.	6	6	Vt.	6	6		
Mich.	6	6	Va.	3	3		
Minn.	6	2	Wash.	3	3½		
Miss.	3	3*	W. Va.	5	5		
Mo.	5	5	Wis.	6	6		
			Wyo.	8	8		

* Mississippi one-year limitation bars liquidated (penalty) damages for a longer period; three-year statute covers only back overtime and other wages.

½ Held unconstitutional as a bar against back overtime pay and damages.

* Court subsequently ruled action to recover overtime compensation, liquidated damages, etc., is not covered by this statute covering contractual obligations. Suits are covered instead by a two-year "catch-all" statute.

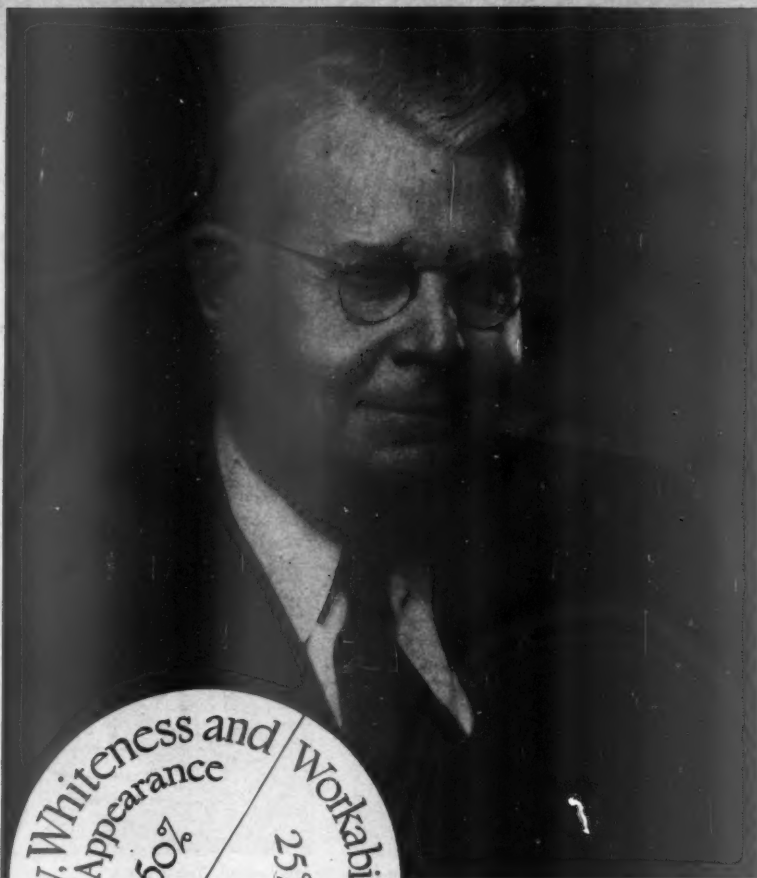
legislation which singles out employee wage claims for tighter restrictions. If upheld in federal courts, this position may have strong bearing on the retroactive liabilities of employers and on the now flaming portal-pay issue in at least eleven other states.

• **Three Disapprovals**—Precedent may be found in three earlier suits based on revision of state statutes of limitations:

In Iowa, a federal court ruled that lowering of the limit on wage suits from a general five-year period to six months was illegal. The court held that the changed law was a denial of equal protection to those seeking to assert claims under federal statutes (Republic Pictures Corp. v. Kappler).

An Oregon law reducing the period of wage claim retroactivity from six years to six months was ruled illegal by the state supreme court. Reasoning was much the same as in the Iowa case.

In South Carolina, a federal court de-



Treasurer J. Frank Morrissey's Bond Paper Pie Chart

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"Balanced" Certificate salutes "controlled" Interlaken Bookcloth. Crocker-McElwain also maintain

complete control of their pulp and manufacturing processes so that they are able to hold a correct balance of qualities in their Certificate Paper Family. Certificate Bond, Opaque, Ledger and Index are all balanced for modern production needs by the exact pop test, tear and folding endurance for their fibre content. If you want a balanced paper for better appearance and workability, and for faster production, specify Certificate, Bond, Ledger and Index.

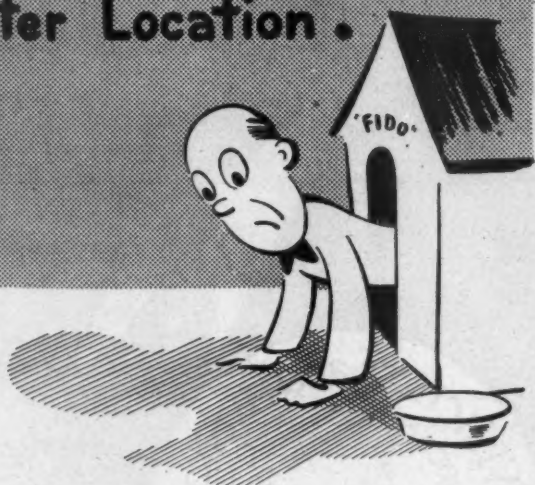
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cision barred an attempt to reduce retroactivity from six years to one year.

• **New Tactics**—Efforts to obtain state laws limiting the length of employers' liability for back pay declined sharply in 1946. Instead, state employer associations centered their hopes on a drive to have Congress adopt a federal statute of limitations.

This campaign was spearheaded by the National Assn. of Manufacturers, which pounded at the "retroactive re-fashioning" of the wage-hour law by federal courts. N.A.M. complained against "enormous contingent liabilities . . . accruing against employers" through judicial determination of laws years after they become effective. It asked limited liability for employers who comply with any administrative interpretation of federal wage laws.

• **For Clarity**—Also on the national level, the Wage & Hour Division of the U. S. Dept. of Labor sought a clearly defined limitation of employer liability under its enabling act. Its reasoning was different.

The federal wage-hour act does not itself set any liability limitations. Enforcement is governed entirely by what Wage-Hour Administrator Metcalf Walling describes as "varying state standards, which penalize some workers in the collection of wages legally due and give competitive advantage to violators (of wage-hour provisions) in states with arbitrarily lowered statutes of limitations."

The federal agency asked for a uniform statute to erase present confusion. Considerable difference of opinion now exists within a number of states over just which of several laws should apply to wage suits.

In Mississippi, for instance, a three-year limit is set on employee suits to collect back wages, but another statute restricts collection of liquidated damages (penalties under the act) to a one-year period.

• **Next Chance**—The fight for a federal limitation of liability, strongly opposed by labor unions, was lost by a narrow margin in the last Congress. N.A.M. and the Wage & Hour Division expect to resume the fight—for their differing reasons—when the next congressional session opens in January. A measure setting either two-year or three-year liability for employers probably will win general support.

• **Management Problem**—That possibility is posing a major question to management: Will it be better to bargain now to a settlement (on the basis of what constitutes the minutes of portal-to-portal time to be paid for daily) or wait for possible relief from Congress?

A factor in making that decision is bound to be the question brought up in the Ohio Alcoa case: Will general or special wage claim statutes govern suits?

A SMALL DIFFERENCE IN YOUR

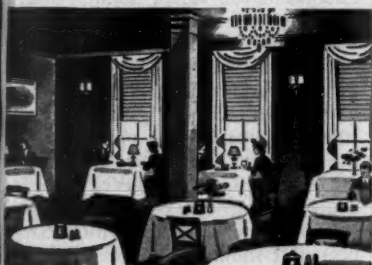
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Labor Docket

NLRB asks Supreme Court to review foremen's status under Wagner Act. Many more labor-management cases scheduled.

The National Labor Relations Board for nearly a decade has been caught uncomfortably between sharply conflicting views on unionization of foremen. Last week the board sought to share its responsibility by urging the U. S. Supreme Court to define the rights given supervisory employees under the Wagner Act.

The court has on its 1946-47 docket a request that it review a lower court decision in the Packard Motor Car Co. case (BW—Nov. 16'46, p102). Headed toward it is another case involving supervisory employees of the Jones & Laughlin Steel Corp. Either case must set a precedent.

• **Seeking Solid Ground**—Last week NLRB took the unusual position of joining the Packard Co. in asking that the high court review a decision which favored the board. In a memorandum to the Supreme Court the board pointed out that while it believed the lower court decision was correct, "it presents an important question which has not been but should be decided."

According to the board, "NLRB welcomes and desires a final adjudication of the positions of supervisory employees under the Wagner Act."

What NLRB did not bother to spell out was the obvious reason for its action. NLRB wants to be on firmer ground when the matter of foremen legislation—and NLRB's interpretation of present laws—comes before Congress.

• **Three for the Court**—NLRB wants the court to answer essentially the same questions that Packard has been asking since it was ordered by a lower court to bargain with the independent Foreman's Assn. of America.

These are: (1) whether supervisors are "employees" within the meaning of the act; (2) whether they can be included in a collective bargaining unit; and (3) whether NLRB grouped them properly in the Packard case.

• **The Line-Up**—The high court also has on its docket a number of other cases affecting management and labor:

• The government has brought a Sherman antitrust case against the United Brotherhood of Carpenters & Joiners (A.F.L.). The court is asked to decide the validity of an agreement between union and employers to bar use of materials not processed under union wage rates and working conditions.

• Three cases deal with the question of company unions. Validity of dis-

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establishment of a company union is asked in a Donnelly Garment Co. case; domination of a union is set for a test in a Wilson & Co. suit; and the legality of a successor to a company-dominated union is up for review in a Keystone Steel & Wire Co. case.

• The propriety of plant guards' membership in the same union which represents rank-and-file production employees will be tested in a Jones & Laughlin

To Study Wage Minimums

New York State took steps toward revision of industrial minimum wage standards recently when wage boards were appointed to study and recommend changes in minimums for hotel, restaurant, and laundry workers.

• State Industrial Commissioner Edward Corsi (seated left) named Joseph T. McGoldrick (seated right) as chairman of the hotel wage board; Judge George Frankenthaler (standing left), former state supreme court justice, as head of the restaurant panel; and George Mintzer, former chief assistant U. S. attorney, as chairman of the laundry board. Each will be assisted by two other public representatives and three each from management and labor.

Present minimum wage standards, set in 1938, are \$14 for a 40-hour week in the laundry industry; 20¢ an hour, plus meals and tips, for service workers in hotels and restaurants, or 36¢ an hour for nonservice employees. Although only a small percentage of workers are now at the minimums, the legal standards are considered important wage guideposts. Once promulgated, the minimums have the force of law.



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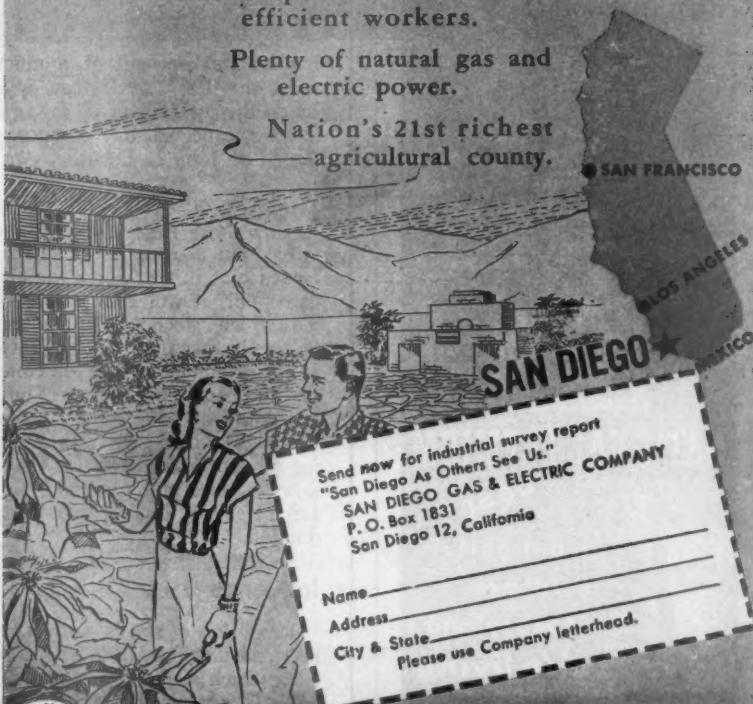
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case already before the court. A second case, involving E. C. Atkins & Co., asks a test of the status of demilitarized plant guards under the act.

• Two appeals question the jurisdiction of the New York State Labor Relations Board (1) in determining a bargaining agent for supervisors in a plant engaged in interstate commerce, and (2) in proceedings involving an employer engaged

in interstate and in intrastate commerce, • Trailmobile Co. v. Whirls may test a veteran's seniority rights.

• Order of Railway Conductors of America v. Swann is expected to go into the ticklish issue of jurisdiction over railroad yardmasters.

• NLRB v. A. J. Tower Co. concerns an employer's refusal to bargain with a certified union.

THE LABOR ANGLE

Steel

Unless blast furnaces idled by the coal strike (page 15) are stoked up quickly, Philip Murray, as chief bargainer for steel labor, which is scheduled to set the 1947 wage pace for the C.I.O., may find himself in a very unhappy position.

Steel wage contracts expire in February, and well before that time formal and informal discussions will begin between Murray's steelworkers union and at least one of the big producers. Whether the C.I.O. will make its first overture to U. S. Steel, as it did last year, or to the Little Steel companies, as it has done on other occasions, Murray, for obvious tactical reasons, won't say. But all of the major producers, busy shutting down facilities because of the coal strike, are thinking hard about their own industry's February deadline. No one in the trade will be surprised if many of the furnaces now being banked are kept out of production until the 1947 steel wage is set—unless the coal strike ends faster than anyone expected as sentence was passed on John L. Lewis.

Lockout

As soon as there is any concrete evidence of this to which the C.I.O. can point, it will charge a lockout. To which steelmakers' spokesmen will reply that the industry's interest is not in influencing the outcome of its own wage negotiations, but in operating to minimize potential losses. The Iron Age is already noting that "it is relatively easy to shut down a steel mill compared to the task of getting it back into full production."

Influence

Regardless of steel's motives, however, the large-scale idleness of mill labor which really began this week is an influence on steel wage negotiations which cannot be deflected. If a

substantial part of Murray's membership has to live on unemployment compensation from now until February, the threat of a strike behind Murray's demands will not be as persuasive.

Such appears to be the case, despite the directly opposite opinion expressed by some union leaders. They claim that strike pressure will be greater if a large segment of the membership directly affected can convert a lockout into a strike; that the workers made idle by the lockout can still draw unemployment compensation as strikers (an interpretation of the law with which the Commonwealth of Pennsylvania, for example, may not necessarily agree); and that the workers still employed during the lockout will display an eagerness to join their unemployed brothers on a picket line.

Worries

To the more sober union leaders, these arguments appear to be an effort to string together some ciphers in order to present the appearance of a real quantity. In moments of complete frankness they admit that John L. Lewis has handed the steel companies a formidable weapon, and that it has other union tacticians worried. A few of them, with an acute case of the inferiority complex which Lewis gives all labor leaders, will actually argue that Lewis has planned it that way.

This seems to carry the Lewis demonology too far. The exaggeration is made possible by his well-known animus toward Murray and all his works. And certainly, if Lewis, without playing his own string out too far, creates a situation in which Murray will overreach himself and fall flat on his face, the miners' chief will not back away from the opportunity.

In any event, however, the stake of all of organized labor in the coal strike grows greater every added day a final settlement in coal is delayed.

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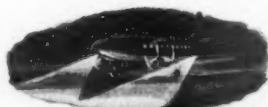
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Up to Congress

Court rejection of law aimed at Petrillo is new warning that legal curbs on unions aren't easy to draft.

Lawmakers in the new Congress this week had fresh evidence that the job of drawing up labor legislation will be no easy one. As demands mounted for some form of legal curbs on recurring strikes in such vital industries as coal (page 15), the restrictive Lea Act was declared unconstitutional in a federal district court.

Congress passed the Lea Act (BW—Jun. 8 '46, p89) last spring during a wave of resentment against the activities of James C. Petrillo, president of A.F.L.'s American Federation of Musicians. It was specifically designed to bar union efforts to "coerce, compel, or constrain"

a broadcaster to hire more musicians than he actually needs.

At the time, Petrillo was demanding that radio stations augment music staffs with "standby" musicians or record handlers. Instead of backing down, Petrillo called a strike against independent radio station WAAF, in Chicago, to challenge constitutionality of the new law.

• **Triple Fault**—There was strong doubt from the start that the Lea Act would withstand a court test. A.F.L.'s full legal guns were turned on it. The union challenged the law as "one-sided and discriminatory" because it was "purposefully and intentionally framed" to cover only one group of workers in one industry.

This week's decision by U. S. District Judge Walter S. La Buy in Chicago upheld the union contention. The court declared the act invalid as a violation of the first, fifth, and thirteenth amendments to the Constitution, and because of its "indefiniteness and un-

Oil Industry Again May Set Wage Pattern

When the Sinclair Oil Co. and C.I.O.'s Oil Workers International Union last year signed a contract for an 18% wage increase, the agreement set a precedent (BW—Dec. 22 '45, p94). Not only other oil wage demands but also pay increases outside that industry were ultimately settled at about that figure.

For this reason, unusual interest now centers on a second contract negotiated voluntarily between Sinclair and the union. Management wonders whether this one, too, will provide a formula for other settlements. H. F. Sinclair, representing the oil company, and O. A. Knight, president of the union, have announced jointly that they are convinced the contract can set another pattern for all industry.

• **Quarterly Adjustments**—Company and union describe the new agreement as a cost-of-living adjustment covering the period from Oct. 1, 1946, to Sept. 30, 1947. An initial wage revision amounted to \$31.20 a month (equivalent of 18¢ an hour). This increase was based on Bureau of Labor Statistics figures on the rise in the national cost-of-living index for the first nine months of 1946.

Future adjustments will be considered quarterly during the term of the contract. BLS figures will be examined, and if there has been an increase or decrease of more than three points over the base date (Sept. 30), a proportionate adjustment—

either up or down—is to be made in the company's cost-of-living allowance for the ensuing quarter. The first reconsideration of the allowance will come on Jan. 1, 1947.

Base rates paid Nov. 15, 1946, will remain in effect. The agreement stipulates that the Sinclair formula will not be used to reduce workers' pay below that level.

• **Give and Take**—Sinclair's negotiations with the union were based on the premise that "a flat wage increase" would be to the detriment of employees, employer, and the entire country. Yet the company recognized that changing costs "should be compensated for on a prescribed formula over a considerable period of time."

In turn, the union agreed to forego demands for base-rate increases.

• **Disagreement**—C.I.O.'s oil workers' union is negotiating contracts with other oil companies, many of which already have adopted the cost-of-living bonus plan in principle (BW—Nov. 16 '46, p86).

While other C.I.O. unions, such as the steelworkers (BW—Nov. 23 '46, p90), also are vitally concerned with a cost-of-living tie-up with wages, there has been no general endorsement of the oil union's new "escalator" agreement. Joe Curran, president of the National Maritime Union, has even denounced it as tending to "freeze" labor's standard of living at the present levels.

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It is our hope that the day is not too far distant when our stocks of steel will be large enough to enable you to get what you want, when you want it. In the meantime, we are improving our facilities in every way we can. Already two new warehouses are under construction in St. Louis and Cleveland and others will soon be enlarged and modernized. We intend that our name shall become more than ever the "Symbol of Service to Steel Users."

We wish you happiness and success throughout the New Year.

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UNITED STATES STEEL

certainty in the definition of a criminal offense."

According to the court, the act (1) abridged the constitutional guarantee of free speech by denying workers the right to picket; (2) imposed involuntary servitude by denying workers the right to strike; and (3) was discriminatory because it was aimed specifically at Pettrillo and the musicians' union.

Government prosecutors announced that they would appeal the court's finding direct to the U. S. Supreme Court.

Moral Victory

Employer agrees to take \$1 to settle wildcat strike suit, but union's admission of company loss is significant.

Management consistently has found that union no-strike pledges may be valid but, if violated, seldom can be made the basis for damage suits. This experience is behind current demands that unions assume financial responsibility in contracts for wildcat strikes (BW—Nov. 16 '46, p. 15).

Recently the Pullman-Standard Car Mfg. Co. settled a suit against the International Brotherhood of Electrical Workers (A.F.L.) with a moral victory. I.B.E.W. acknowledged that under Alabama law it was financially liable for breach of contract. The case was based on a strike of 13 journeymen electricians at the Bessemer (Ala.) plant in violation of a no-strike contract clause. The union agreed to pay a \$1 judgment (suit was for \$250,000) and all court costs.

• **Two Significant Points**—The stipulation signed in U. S. District Court at Birmingham had two other interesting aspects:

(1) I.B.E.W. no longer is bargaining agent for the plant electrical workers; and the 13 A.F.L. electricians who struck Oct. 29, 1945, were discharged as a result of their unauthorized walkout.

(2) Settlement terms were signed by Joseph Padway, counsel for I.B.E.W., and also, significantly, general counsel for A.F.L.

• **Union Admits Loss**—Padway signed a statement that "the direct loss of plaintiff as a result of the strike was substantial by reason of the loss of the plant for production, by reason of overhead and continuing expense for some 300 nonstriking nonproduction personnel reasonably necessary to be retained on a pay basis, excess cost of production on resumption, uncompensated accrual of taxes, insurance and similar items, in addition to the loss of profits on the production of approximately 666 freight cars."

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1946



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Important, too, are such benefits as New York State's central location in the country's richest and most concentrated market, the unparalleled trans-

portation facilities, the steadily decreasing tax rate, the friendly attitude of local communities who seek and encourage new enterprises, and the proximity to foreign markets.

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If any great number of us stop buying because prices are too high, the whole machine of business stops.

Here's our advice to Management: Don't raise prices merely because you can. Keep costs down. Look for improved methods, new materials, new machines. Watch selling expense—watch administrative expense.

And here's our advice to Labor: Produce more before you ask for more pay. Industry cannot afford to continue paying higher wages for less work.

We've all got to produce more to prosper—but we've got to sell, too.

So don't step on your own toes. Don't become your own "forgotten man". Don't forget that *you* are a buyer.

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Yankee Peace Plan

Vermont's joint labor-management conciliation group works out well during its first year. Has no public members.

Businessmen and unionists who are now steering the Vermont Industrial Relations Council into its second year have little faith in magic formulas. They do believe, however, that the council's handling of six conciliation cases has demonstrated that a labor peace plan which has already been successfully tested in various American cities can also be effective for a whole state.

• **Only One Failure**—In its very first case, the Vermont council's recommendations were rejected by the employer concerned. Since then, all disputes—including two in which federal conciliators had failed—have been settled.

State conventions of both C.I.O. and A.F.L. have given the council their backing, and six recent union contracts have named it the sole arbitration agency.

• **Organization**—The setup is simple. The council consists of eight management members (four whose plants are unionized, four whose plants are not) and eight labor members (four from A.F.L., four from C.I.O.).

Hearings are held by panels of eight—four from industry, four from A.F.L. or C.I.O., depending on which is affected.

The chairmanship rotates. On the industry side, Albert A. Cree, president of Central Vermont Public Service Corp., is co-chairman, and Herbert C. Gates, general manager of E-Z Mills, Inc., is vice-chairman. For labor, Andrew Mitchell, president of the Vermont Federation of Labor (A.F.L.), is co-chairman, and so is John C. Clawson, secretary-treasurer of the State Industrial Union Council (C.I.O.).

• **Advantage Claimed**—Lack of public members is regarded as an asset, since it forces labor and management to seek common ground. In a deadlock, the council may call in an outsider (first as an adviser, then to vote if the council so decides). But it is felt that the very necessity of such action will discourage the last-ditch thinking which characterizes tripartite bodies.

Procedure is uncomplicated. Requests for conciliation or arbitration must be signed by both employer and union representative; the council must hold a hearing within ten days after the request; a written decision is sent to the disputants within five days after the hearing.

• **Triumph**—Biggest coup of the council was its settlement—in 34 hours—of

the 1946 granite workers' strike over wages. Parties were the Barre Granite Manufacturers Labor Committee and the Granite Cutters International Assn. of America (A.F.L.). More than 80 firms and 1,050 laborers were involved. There had been much ill will and some bloodshed. Federal peace efforts had been unsuccessful.

The strike had started on Monday. The council met and acted unanimously on Friday, and the men were back at work the following Tuesday.

• **Local Hearings**—Headquarters of the council are in Montpelier, but hearings are held, if possible, in the affected community. The only sanction involved is the esteem of folk that employer and employee have to live with.

Much of the council's success is credited to its enlistment of top men from both management and labor camps. These men get used to working together. They meet at intervals for cocktails and dinner, and for informal discussions that dispel emotional strain.

• **A Unique State**—Saul Wallen, former chairman of New England's Regional War Labor Board, attributes the council's successes partly to the fact that Vermont's problems are more easily manageable than those of the great industrial centers.

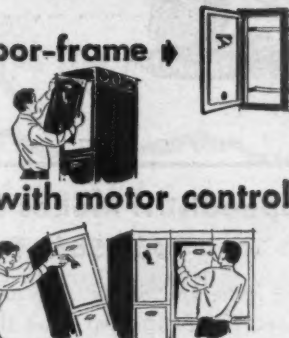
Theodore F. Kane, council secretary,



TEACHERS' PETS

There was some question, to be sure, over whether they approved of teachers' strike aims, or just the enforced holiday, but St. Paul (Minn.) students entered into the spirit of a teachers' union walkout. Boys served hot coffee to instructors on icy picket lines (above), and kept fires burning. This week, however, the vacation for 36,578 children in 77 schools appeared near its end. A compromise loomed over teachers' salary demands.

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puts it this way: "We do not feel that our council is by any means a cure-all for our national labor troubles, but we do feel that the council method is a progressive, common-sense approach to the problem, and Vermont is an ideal laboratory to try it on a small scale."

Operation and Experience

Additional facts about the Vermont Industrial Relations Council, and about Vermont labor relations in general:

- On request of either party to a dispute, the council will make "an effort to secure acceptance of conciliation."
- If an unorganized labor group requests it, the council will name a special board of three persons, identified neither with industry nor with labor, to act in the case.
- In five of the six cases to date, the initial move was made by a C.I.O. union. In the Barre granite case, the manufacturers' committee took the initiative.
- The council has had no arbitration case so far.
- Hearings are not open to the public, but are a matter of permanent record.
- Vermont has about 41,000 manufacturing employees. Of these, C.I.O. claims about 10,000; A.F.L. about 6,500.
- Jurisdictional strife has played virtually no part in Vermont's labor history or thinking.
- There was no strike or work stoppage in the state during the war. The granite strike was the only serious local one since then.
- The fact that Vermonters are Vermonters naturally has a lot to do with the council's effectiveness.

Speaking of Lewis, Here Are Worker Views

Organized labor is watching the John L. Lewis-U. S. government showdown (page 15) with mixed emotions. Many workers now consider Lewis the union leader doing most to win better wages, hours, and working conditions for labor. At the same time, they believe that his activities may in the long run be harmful to all unions.

A recent nationwide survey made for McGraw-Hill's Factory Management & Maintenance among wage earners in manufacturing industries disclosed that:

- Of those polled, 68% think some top labor leaders have hurt unions in the eyes of the public by demanding too much or calling too many strikes.
- Of this group, 60% say Lewis has hurt labor the most; 5% name James C. Petrillo of A.F.L.'s musicians; and about 4% name A. F. Whitney, president of the Brotherhood of Railroad Trainmen (ind.).
- Despite fears that Lewis' strategy hurts labor as a whole, workers polled on what leader is doing most to help them gave the mine union chief almost as many votes as C.I.O.'s Philip Murray and A.F.L.'s William Green received together.

Insurance Goal

Benefits financed solely by employer will be demanded in U.A.W. program. Canadian Ford plan may be compromise.

The welfare-conscious United Auto Workers (C.I.O.) has dispatched to all its locals details of a general demand for employer-financed insurance. The locals, in turn, will present the demand to all companies having U.A.W. contracts.

• **What They Want**—The program calls for the employer to contribute 3% of his total payroll to a general insurance fund. From this pool, benefits would be provided for sickness or accident. These would amount to not less than 90% of average earnings for a maximum of 52 weeks for any single disability.

In addition, hospital, surgical, medical, and maternity benefits would be included.

Finally, the insurance would provide death or survivor benefits of at least a year's average earnings. The same sum would be distributed in any case of total and permanent disability.

• **Canadian Ford Plan**—U.A.W. already has a scattering of agreements which provide for insurance benefits. The latest big one was negotiated in October between Local 200 and the Ford Motor Co. of Canada, Ltd., in Windsor.

This Ford plan is jointly supported by the company and the workers. The company assumes administration costs; a number of Canadian insurance companies are assuming the actuarial risks.

Most hourly paid employees fall in a category which calls for their paying a premium of \$1.71 per two-week pay period if they have dependents. The pay is \$1.43 if they have no dependents.

For this premium the worker obtains \$1,500 in life insurance, and a weekly indemnity of \$15 for sickness or accident. He also gets an allowance of \$4 per day for hospital expenses for himself or \$3 per day for dependents. Other benefits are special hospital service up to \$20, and up to \$150 for surgical expenses.

• **Paid-Up Insurance**—An interesting feature of this plan is the combination of paid-up and term insurance. This is purchased at a rate of \$1 per month per \$1,000 of insurance. At least half of this money buys paid-up insurance which remains in force for the employee's lifetime, with no further payment.

Since this accumulates from year to year, an employee leaving the company can take a fully paid-up policy for the amount equal to the sum he has paid in. Or he can take cash equal to at least half the amount he has contributed for life insurance, plus interest.



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FINANCE (THE MARKETS—PAGE 110)

Caution Marks Bank Credit

With volume of business loans at an all-time high, bankers veer away from long-term lending in favor of greater liquidity. Precautions grow as inventory worries increase.

In the war years the commercial banks of necessity were largely occupied with the job of helping finance the nation's all-out military effort. They accomplished this by enormous purchases of Treasury bonds for their own holding, as well as by extension of substantial credit to permit purchases by clients. And in that period their usual standby, business loans, obviously nose-dived to relatively unimportant levels.

• **Back to Normal**—Since V-J Day, however, that picture has changed sharply. Commercial banks rapidly are returning to their normal function of supplying business loans (BW—Nov. 9 '46, p74).

By last month, commercial, industrial, and agricultural loans of Federal Reserve member banks in the New York district had zoomed to \$3,734,000,000, a new high. Similar loans of all member banks had risen to over \$10-billion, some 70% above their year-earlier level.

• **Trend to Term Loans**—Contributing importantly to this uptrend, particularly in large city banks, has been the so-called "term loan." This is a somewhat new type of bank credit considered by many to be definitely outside the scope of ordinary commercial bank operations (BW—Jan. 19 '46, p68).

Unlike the less-than-a-year transactions that characterized the normal prewar business loans of commercial banks, term loans extend for as long as twelve years. Usually they are repayable on a serial instalment basis.

Proceeds of many such postwar loans have been used to buy additional "fixed assets." Transactions of this type in the past usually required "permanent" financing through bonds or stocks.

• **Opposition Spoke Up**—Because of these factors it's not surprising that some time ago certain Manhattan banking authorities began to express publicly their worries over the increasing use of this financing medium.

One prominent objector had no hesitancy recently in describing term loans as "unsound" from a commercial banking point of view. Loans of this type, he warned, could bring about "a non-liquid frozen position" in jigtime if used too greatly since commercial "bank liabilities are quick" and therefore they require the holding of "read-

ily liquefiable" short maturity assets.

• **Majority Disagreed**—Most New York bankers, however, weren't in agreement then with this point of view. Term loans were described by one important proponent as destined to take their place "among the best assets we have ever had." And those favoring them thought that many such loans could be made before too large a ratio of deposits was invested in advances of that type.

During much of 1946, as a result, term loans extending as long as ten to twelve years proved most popular among the larger banks seeking to in-

Lending Cupid A Helping Hand

This friendly, helpful bank has many opportunities, in the course of a year, to do the unusual, to render extra measures of service. But we take them in stride because it is always the dearest desire of this organization to be good citizens, good neighbors, and good business allies to its customers.



Among the most interesting examples of these "unusual services" have been helping returned overseas Veterans get their finances from foreign lands into this country so that they could be married. The Immigration Department requires that a \$500 Treasury Coupon Bond be posted guaranteeing that the immigrant will not become a public charge. However, El Paso Bank came in as its surety those bonds for their sweethearts.



Many new citizens arriving from Mexico also require these special bonds—on, being located here on the border, we keep a supply of them on hand at all times.

Honestly, this progressive bank offers EVERY modern banking facility—but it is the extra measure of friendliness, of helpful service which has contributed to make the El Paso National grow so rapidly and so soundly.

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The friendly BANK
TEXAS • STOCKTON • EL PASO, TEXAS

TO BRING BACK HIS BONNIE

Even Cupid may call on a bank for aid nowadays; conversely, in its pursuit of goodwill in the consumer credit field, a bank may invoke Cupid. In an advertisement (above) that looks like a valentine, the El Paso National Bank offers aid to former servicemen whose sweethearts are overseas. To help bring home the prospective brides, the bank will advance money for the \$500 Treasury bond required by the Immigration Dept.

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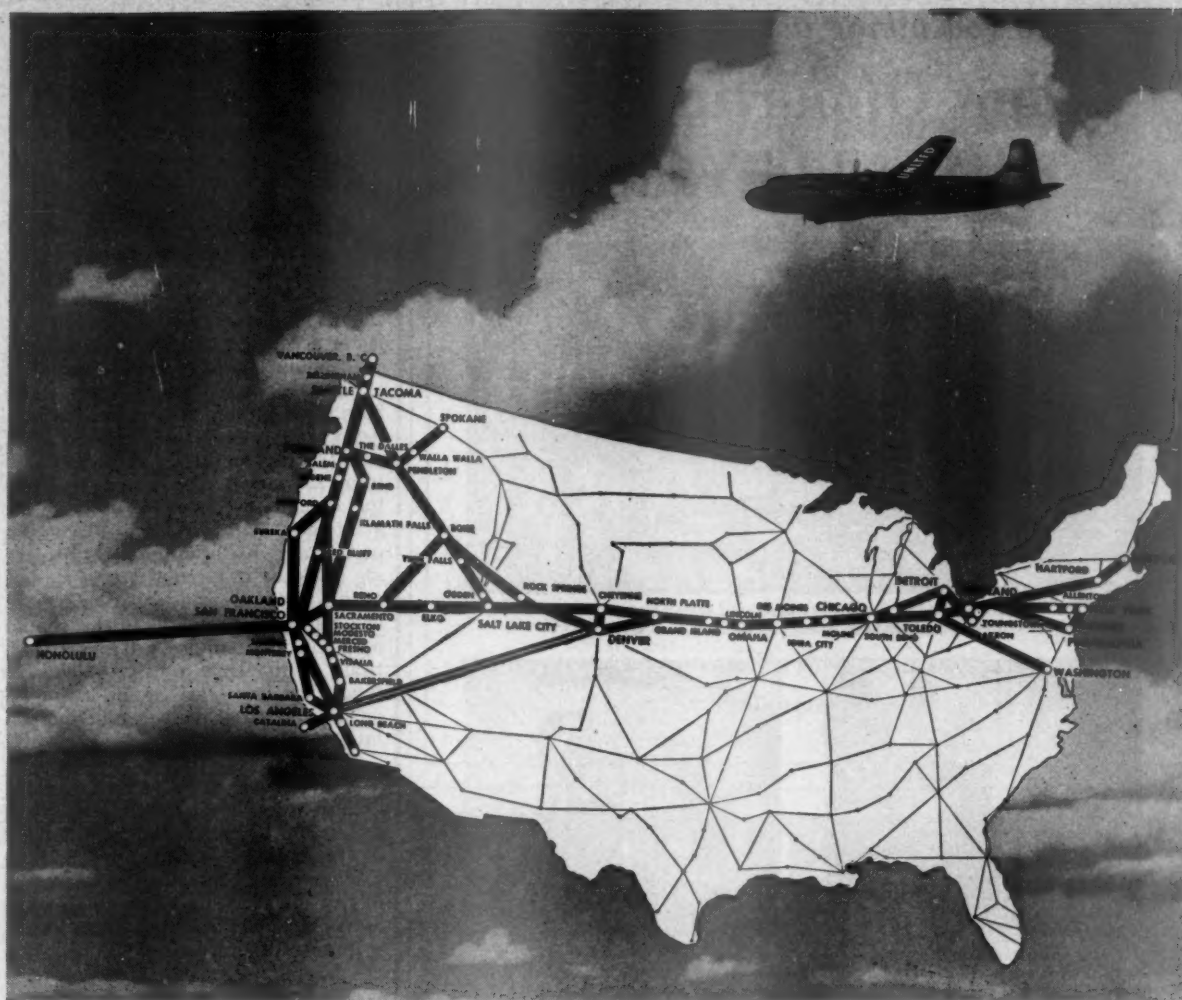
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crease their business-loan portfolios.
• **Change of Heart**—In recent months, however, the picture has changed considerably. Banks aren't going after term loans as much nowadays. When ten-year credits are granted now, it's noticeable that the recipients are always top-flight credit risks. Otherwise five years, or less, appear the maximum.

A primary reason for this recent change of heart seems to be a growing belief, even in the minds of those once favoring them, that term loans actually have no place in institutions where the bulk of deposits rests in demand accounts. However, that isn't the only factor accounting for the trek back to old-fashioned prewar lending policies.

Just as potent, for example, have been (1) the record flood of applications recently for orthodox short-term credits, and (2) the increasing signs that demand for such loans will remain heavy for at least several years.

• **Interest Rates Harden**—Playing a part, as well, has been the slight hardening disclosed in interest rates since last spring, a trend many bankers believe will continue. Obviously, if this should occur, future earnings will suffer drastically if too large a part of lendable funds has been tied up in long-term credits granted at present under-normal interest rates.

The new caution now governing lending policies, however, isn't confined only to term loans. It applies to most sections of the nation, and to bank loans of the normal short-term type. Many bankers expect a further hardening of money rates and thus have been inching up the rates on their loans lately.

• **Inventory Worries**—One thing bankers generally are now watching closely is the inventory situation of their clients. Many remember only too well that much bank trouble in the early 1920's was attributable to loans made against inventories that later proved hard to move. They appear determined to make certain they won't get caught again.

• **New Precautions**—Under similar close scrutiny is the progress being made by new companies, and by old companies which have lately been branching out extensively into brand-new fields. Already there have been several flops which have frozen fair-sized amounts of bank capital.

Where lower-grade loan risks have been involved of late it is noticeable that some banks have taken extra precautions to protect themselves. More than one recent corporate borrower has found it necessary to agree to dividend restrictions should future earnings drop off sharply. And some banks are demanding that borrowers maintain a better-than-normal working capital position during the life of their loan agreements.

Tax on Movies

Many cities, seeking new revenue sources, turn to levies on theater admissions. License fees also are on uptrend.

The sensational postwar prosperity of the moving picture industry (box, page 96) hasn't been overlooked by municipal finance officers frantically seeking new sources of revenue.

Attempts to tax movies have been made by many city, town, and village taxing authorities during the last six months. A survey of the American Theater Assn. reports such efforts in 23 states. Many of the nation's largest cities have recently endeavored to squeeze new revenues out of that source.

• **Admission Tax**—In the recent drive the most frequent device probably has been the addition of a small charge to the regular admission fees paid by moviegoers. Many tax authorities have increased the charges for theater licenses. Others have levied assessments against theater gross income from admissions.

Los Angeles, New York, and St. Louis recently considered augmenting their revenues by movie taxes. But they decided not to try this immediately.

However, Washington is now considering a 10% admission tax, and Boston a \$1-per-seat annual charge. Pittsburgh is considering a levy on theater admissions. Chicago is pondering a $\frac{1}{2}$ of 1% to 3% admission tax to replace its licensing system. The present plan costs theaters \$220 to \$3,200 annually.

• **Boosted to 10%**—Philadelphia is one big city sitting pretty on movie taxes. Despite public objection, that city recently hiked its ticket tax from 4% to 10% of the admission price.

Many of the nation's smaller cities haven't been idle. In Oregon, Portland, for example, has lately been collecting a 1¢ tax on each theater ticket. Atlantic City is assessing a 3% tax. Charleston, W. Va., has a 2¢-per-ticket levy. Both Canton, Ohio, and Springfield, Mo., are now talking of a 1% tax.

• **License Fees Hiked**—Rochester, N. Y., recently boosted its old \$50 theater license fee to \$900 for all houses seating 2,000 or more. Milwaukee reports a sharp hike in its license fees. These cities, however, represent only a sample.

Few theater owners expect to see any change in the trend soon. Instead, they are aware that not much more additional tax revenue can be squeezed out of real estate owners. They also know the need of municipalities for substantial additional revenues. They realize that this isn't a temporary situation.

• **Opposition Mounts**—Nevertheless, theater owners as a group aren't shoul-

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Hollywood—A Postwar Record-Breaker

The motion picture industry, a much-publicized and leading war-baby (BW-May 11'46, p58), is now proving one of the postwar period's biggest money makers (BW-Nov. 30'46, p38). In fact, 1946 earnings of the trade's Big Five will come close to doubling 1945's record-breaking income.

The reasons are not hard to find. Despite earlier gloomy predictions, movie-going has proved even more popular in 1946 than in 1945. The box office reflects the stimulus of

high consumer income, the return of servicemen, and greater leisure time. The industry's highly profitable foreign markets have also shown sharp expansion since V-J Day.

Some fiscal factors have proved beneficial, too. Earnings are no longer sharply reduced by the wartime excess-profits tax. Improvement in finances, accomplished with wartime earnings, has lowered today's interest requirements.

Comparative earnings of the Big Five are shown below (000 omitted):

	Fiscal years of	1938	1942	1944	1945	1946
Loew's, Inc.						
Gross income.....		\$108,892	\$119,481	\$145,121	\$153,885	
Income taxes.....		1,329	9,704	15,162	10,483	
Net income.....		9,918	11,810	14,517	12,913	E \$17,000
Working capital (H)...		40,249	58,944	70,184	91,967	
Long-term debt (H)....		17,962	25,116	29,340	43,369	
Earned surplus (H).....		47,787	63,961	79,679	85,641	
Paramount Pictures, Inc.						
Gross income.....		104,360	126,989	157,687	162,361	
Income taxes.....		484	16,129	29,874	24,145	
Net income.....		2,533	13,125	14,743	15,425	E 45,000
Working capital (J)....		29,012	40,618	48,846	53,559	
Long-term debt (J)....		42,923	30,624	21,120	12,075	
Earned surplus (J).....		9,347	28,926	46,160	55,399	
Radio-Keith-Orpheum						
Gross income.....		56,451	61,401	84,903	96,119	
Income taxes.....		732	5,545	5,740	
Net income.....		D 186	640	5,206	6,031	E 14,000
Working capital (J)....		B	15,781	21,155	25,648	
Long-term debt (J)....		B	22,803	17,478	11,457	
Earned surplus (J).....		B	562	9,509	14,906	
20th Century-Fox						
Gross income.....		60,401	69,052	179,472	185,673	
Income taxes.....		806	7,460	25,100	21,650	
Net income.....		7,252	10,610	12,480	12,746	E 22,000
Working capital (J)....		24,350	36,981	42,317	53,471	
Long-term debt (J)....		8,605	9,328	
Earned surplus (J).....		13,969	23,782	35,734	42,062	
Warner Brothers						
Gross income.....		102,206	119,271	141,183	146,618	
Income taxes.....		1,092	10,279	15,912	16,700	
Net income.....		D 327	8,555	26,953	9,901	E 19,000
Working capital (H)....		8,345	14,239	25,825	37,451	
Long-term debt (A, H)...		77,274	55,956	49,672	42,452	K 25,615
Earned surplus (H).....		D 327	17,411	28,871	F 29,977	K 39,175

A—Includes funded debt due within one year; B—Reorganized as of Jan. 1, 1940; C—1944 and 1945 figures include all voting-controlled subsidiaries; D—Deficit; E—Estimated; F—After charge to eliminate \$8,796,000 of "goodwill"; G—Preliminary report; H—As of approximately Aug. 31; J—As of approximately Dec. 31; K—As of June 1, 1946.

dering any added portion of the tax load without a fight.

Theater patrons, when directly affected by admission taxes, are putting up a fight also.

Miami voters, for instance, recently turned down a proposal for an amusement tax. Atlanta also has been forced to drop a proposed 1¢ tax on each 50¢ charged for theater admissions. The Illinois legislature recently refused to approve a proposal for a 5% tax. In a state-

wide referendum Maine turned down a similar suggested tax.

• **Must Return Tax**—In San Bernardino, Calif., the Superior Court has just ruled that a 3¢ municipal tax on theater admissions is unconstitutional. In this test case the court held that such a levy is discriminatory since it places an inequitable tax load on a single type of business. Similarly taxed theater owners elsewhere in California are now expected to demand refunds, too.



1947



1948



1949



1950



1951



1952



1953



1954



1955



1956



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THE LABOR CRISIS

... "Absolute power corrupts absolutely"

The new Congress is going to overhaul the federal laws governing organized labor. If the election returns left any doubt about that, John L. Lewis has removed it by torturing the nation with its second soft coal strike in six months.

If, however, the overhauling is to get at the roots of our labor troubles, it must go further and deeper than most of the proposals would go. Indeed, it must not stop until it has dealt decisively with that most basic cause of devastating trouble—the entrenched monopolistic power of enormous international unions, now concentrated in a handful of union leaders. Industry-wide collective bargaining is one outgrowth of this power.

"Power tends to corrupt, and absolute power corrupts absolutely." That great truth, phrased by the historian Acton, is as true of labor leaders as it is of business leaders, princes or potentates. It is also true that John L. Lewis and some of his fellow labor leaders now wield what approaches absolute power in their respective domains. Failure to recognize these facts and act on them can make a tragic mockery of the present opportunity to restore good sense and good order to our labor relations and our national life.

To realize this opportunity the labor monopoly must be made a major target.

In the minds of many people, particularly in the business community, the root cause of our labor troubles is to be found in the National Labor Relations Act, commonly called the Wagner Act. They feel that if they could get rid of the one-sided handling of a number of key labor problems provided by that act and its administrators, we would have the legislative part of the problem of creating good labor relations pretty well solved.

To be sure, there is occasion, long overdue, to balance up the lopsided treatment of labor relations by the Wagner Act and those who apply it. It has been so interpreted and applied as to deny free speech to employers. On occasion it has extended the special protection of the federal government to workers strik-

ing to force employers to break the law. It has done the same for workers striking to force the federal government to change its policy the way the strikers want it changed.

The Wagner Act has required employers to bargain with unions, but imposed no companion obligation upon unions to bargain with employers. It has given protection to workers who have broken their agreement by striking. It has been applied so as to break orderly lines of management by encouraging and giving special protection to union organization of foremen who, to do their work efficiently, must represent management. Abuses such as these should be cleaned up, and soon.

Monopoly is the Target

But if perfection were attained in eliminating all of the abuses stemming from the Wagner Act, numerous and grievous as they are, the basic problem of establishing the legislative foundations of sane and safe labor relations in the United States would by no means be solved. John L. Lewis and his fellow labor dictators would, no doubt, be annoyed, but their power would not be seriously impaired. *That power is derived from monopoly control of labor.* Just as in the case with any other kind of monopoly power, it will only be made subservient to the public interest by attacking it at the source and smashing it.

The way to do that is to apply the anti-monopoly laws to monopolies in the field of labor just as they are applied to business and industrial monopolies. At the same time more vitality should be pumped into these laws all along the line.

When our basic anti-monopoly law, the Sherman Antitrust Act, was passed in 1890, it was designed to apply to economic monopolies of all kinds, and was so held by the courts. Organized labor sought exemption from this law, largely on the ground that its bargaining power was weak, as compared with that of industrial corporations. In recent decisions, a majority of the United States Supreme Court justices

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have held that, when combined with the Clayton Act of 1914, the Norris-La Guardia Act of 1932 gives organized labor virtually complete exemption from the antitrust laws.

In the meantime, the relative weakness in bargaining power which was made the occasion for exempting organized labor from the antitrust laws has become a myth. In soft coal, John L. Lewis is the monopolist. Through his United Mine Workers he controls about 90% of the miners. No one of the thousand or more highly competitive companies engaged in soft coal mining controls more than about 5% of the output.

In steel the monopoly control is that of Philip Murray's United Steel Workers whose organization represents well over 80% of the production workers in that industry. United States Steel, the corporate "giant," controls only about one-third of the steel making capacity. In automobiles the United Automobile Workers represent about 90% of the production workers. A year ago the union's officers flaunted their monopoly power by announcing plans to pick off one automobile manufacturer after another by a series of centrally controlled strikes.

Industry-Wide Bargaining

Confronted by the rise of government-fostered monopoly power in the hands of organized labor, employers in some industries have sought to match it by joining together for collective bargaining on a more or less industry-wide basis. In other industries, notably steel, the federal government, through the War Labor Board, took the lead in forcing a pattern of industry-wide bargaining. Bedevilled by a myriad of cases, the Board thus sought to settle scores of them in the steel industry by one action.

It is easy to understand how an employer, confronted by an industry-wide monopoly of labor, would be tempted to join with his fellow employers in an industry-wide bargaining group. In that way he might see a chance to establish something like equality in bargaining power.

However, if the employers' bargaining group were as effective as the union in creating a monopoly set-up, it would merely confront one monopoly with another. That, in turn, would heighten the chances of having either a devastating head-on collision as a result of failure to agree, or having the two monopolies reach an agreement at the expense of the consuming public.

Actually, however, the chances that employers can create an industry-wide bargaining group as tight as

that created on the side of labor by union organization are virtually zero. For if a group of employers were to agree to shut down in unison or take other united steps to balance the bargaining power created by the threat of a monopolistic union to strike, they would unquestionably find themselves on the receiving end of an indictment for violation of the federal antitrust laws.

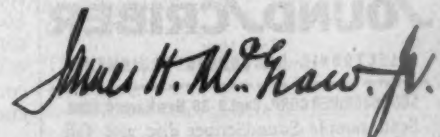
To Break the Monopoly

Thus, both from the point of view of the public and the point of view of the employer, industry-wide bargaining is no effective offset to the monopoly power created by industry-wide unions.

The only way to cope with this monopoly power is to subject it to the anti-monopoly laws in the same way business and industrial management are subjected. In the process industry-wide labor monopolies would be cut down to safe size, possibly by limiting the percentage of workers in any industry who are permitted to belong to a single labor organization.

Also application of anti-monopoly laws would clean out local pockets of labor monopoly which block the way of industrial progress. As matters stand, the freedom of unions from control by the antitrust laws permits organized workers in one city to refuse to install equipment shipped in from another city, thus establishing private tariff walls. It also permits organized workers to refuse to install or work on materials made by other workers whose union affiliation, or lack of it, they do not like.

If the anti-monopoly laws were applied to organized labor, boycotts of this sort would be outlawed. In the aggregate they now take a tremendous toll for no legitimate purpose. But primarily John L. Lewis and a handful of his fellow labor dictators might be cut down to a size that can be safely accommodated by the American democracy. If that is not done, the last great opportunity to give industrial and political democracy a chance to work, in its last great stronghold, will be lost. From such a tragic turn of events no one would lose more than the American worker.



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• **Advice Needed**—Corns believes that many country banks which are too small to afford the fees of a consultant urgently need management advice and service beyond what they can get free of cost from their Wall St. and La-Salle St. correspondent banks. To learn modern bank operation, a country bank can use the Bank of Chicago's consultation services for first-hand study of the operating techniques that Corns developed and recommends.

To become eligible for this service, the country bank places a correspondent balance, to be maintained relatively inactive, with the Bank of Chicago. (Corns emphasizes that this will be in addition to existing city accounts maintained by the country banks, will not replace or reduce established relationships.) The new balance will entitle the country bank to send its officers or employees to study the Bank of Chicago's operating techniques at first hand and get advice on how these can be applied back home.

The Bank of Chicago plans to get its compensation for this consultation service by investing the country balances in government. The rest of the new bank's income-producing business will presumably be financed from deposits of its local customers.

• **Profit on Small Loans**—Corns is also counting heavily on a plan he has developed to make consumer credit a money maker for the bank; he says that all too often it is a loser. By a simple patented record form, Corns says he can set up such a loan on the bank's books at a cost of around \$2, compared with \$4.50-\$6.75 by methods now widely used. All consumer credit loans made by the bank will then be insured by a local finance company at a charge of between 1% and 2% of the total outstanding.

The finance company enters the picture only when such a borrower defaults. It then takes over the account, uses its established facilities to make repossession and dispose of goods. By combin-



Marshall Corns (above) believes in simplified forms and setup—at his own Bank of Chicago and in its correspondent country banks, for which his company provides a model.

ing his simplified forms and use of the finance company on defaulted consumer loans, Corns calculates that his bank stands to make 3% net on such business, with no risk.

• **40% Saving**—Corns considers that the outstanding features of the operating systems in his new bank are reduction of duplicate records to a minimum, simplification of forms, and use of a system of internal audit controls. He asserts that these methods cut the cost of handling transactions 30% to 80% below those commonly used in small banks, and that a fair average saving would be around 40%.

Except for four or five officers, the Bank of Chicago's personnel will be 100% female.

STILL UP IN THE AIR

The U. S. Supreme Court will have the final word in the controversy over seizure of the Long Beach Federal Savings & Loan Assn. by Federal Home Loan Bank Commissioner John H. Fahey (BW—Jun. 1'46, p52).

Recently a federal court in Los Angeles ruled the seizure illegal and ordered Fahey's conservator to return the \$26,000,000 loan association to its officers and directors (BW—Oct. 12'46, p61).

Fahey refused to take it lying down. On a subsequent writ issued by Justice Wiley T. Rutledge, Fahey has regained possession of the institution pending Supreme Court action on his appeal. Charges of mismanagement preceded the original seizure.

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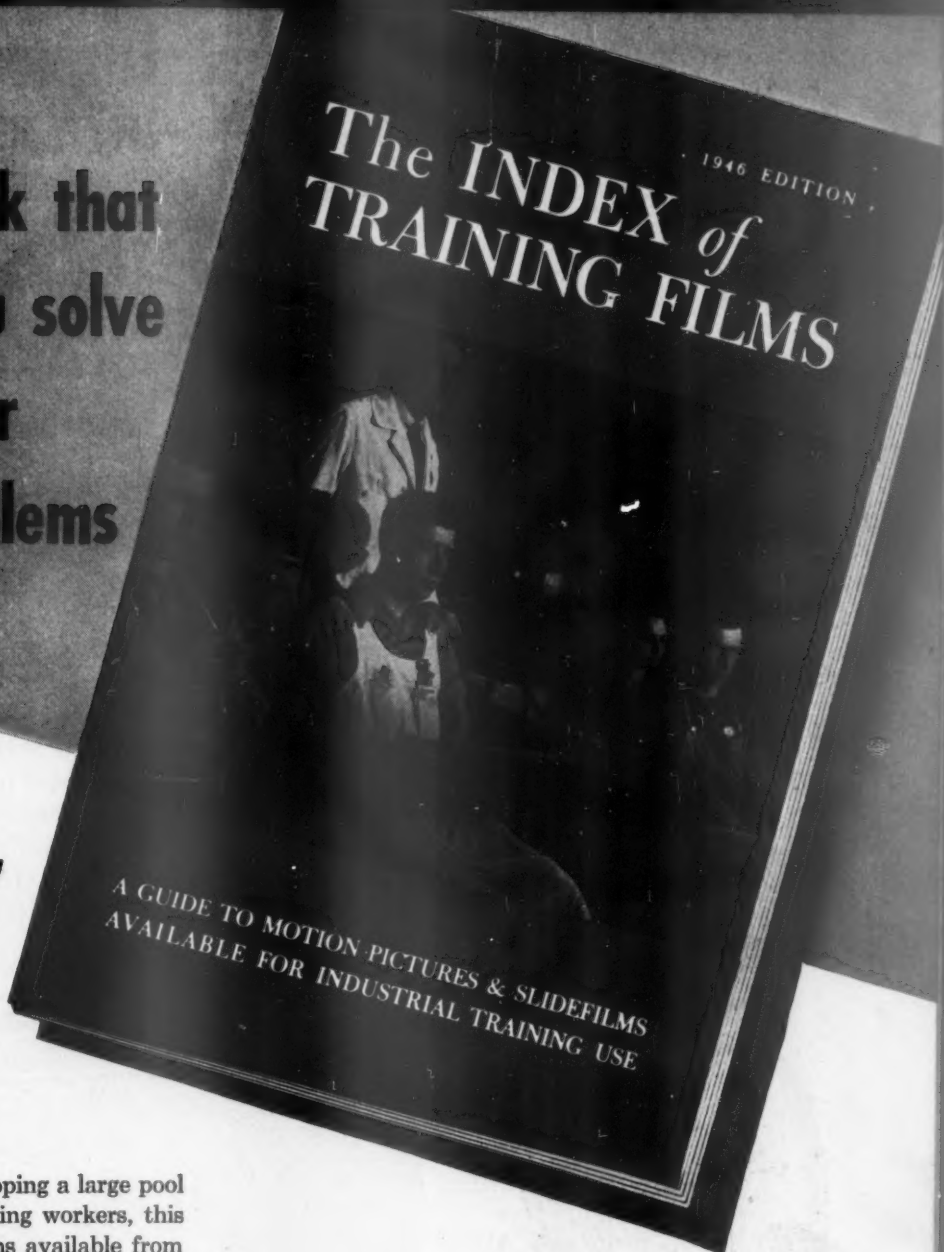
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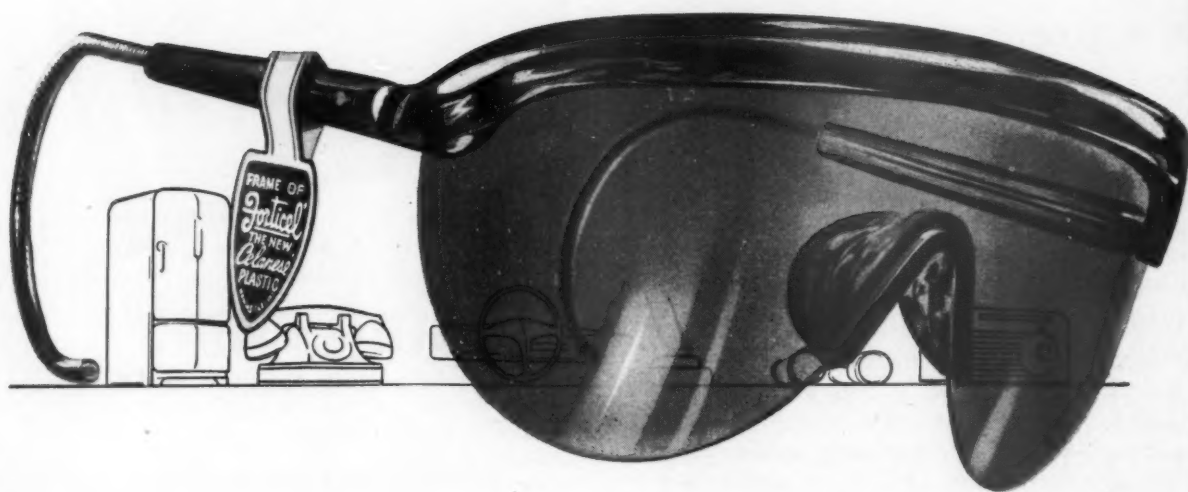
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THE INTERNATIONAL OUTLOOK

BUSINESS WEEK

DECEMBER 7, 1946



Europe is beginning to be hit by our coal strike.

U. S. deliveries, scheduled at two million tons a month at the beginning of the year, never reached that figure.

Total shipments in the first ten months barely reached 15 million tons. In November they plummeted, and even a quick end to the strike could help little in December.

Ten European countries are importantly dependent on U. S. coal during their war-made emergency.

Italy tops the list, since 85% of all its coal must be imported and the U. S. had undertaken the responsibility.

Finland, Sweden, Norway, and Denmark have almost no coal of their own, have been securing from a third to a half of their supply from us.

Holland, Belgium, and France have found it necessary to supplement local production and the trickle from the Ruhr with imports from the U. S.

Portugal has been buying here because of Britain's inability to resume European exports which—before the war—amounted to 45,000,000 tons.

And Switzerland has had to depend on imports from the U. S. to substitute for former deliveries from the Ruhr and Saar.

The situation is made more critical by the decision of the military control authorities in Germany to use more Ruhr coal in the next four months to speed the local rehabilitation program.

Ruhr coal exports are being cut 33% just when they are most needed.

Electric power deliveries from western Germany to France have already been drastically slashed.

Holland, where local coal output is at barely 50% of prewar levels, will be forced to curtail all industry because of the loss of U. S. deliveries and the drastic cut in Ruhr shipments.

There are sure to be political repercussions.

Britain's recent Left-Wing Labor revolt in Parliament was based on the premise that the U. S. is a completely unreliable economic partner.

The present failure to meet promised coal deliveries will be used as supporting evidence—especially if Russia finds a way of stepping into the breach by releasing some Polish coal to help meet the emergency.

Italy and France, where governments are far less stable than in Britain, may react more violently if the loss of delivery continues a long time.

Even Ottawa warned Washington of internal political complications sure to develop if there is no settlement soon.

This accounts for the urgent plea of Secretary of State James F. Byrnes to President Truman that he end the coal strike as speedily as possible.

You can expect a definite economic plan for Japan to develop in the next few months, with the Pauley reparations program setting the pattern.

Subject to negotiation with ten other interested nations beginning later this month, the U. S. will strive to draw an economic blueprint for a new Japanese economy keyed to:

(1) Steel ingot capacity of 2,250,000 tons (compared with 9 million tons at the wartime peak).

(2) Machine-tool inventory of 175,000 units (795,000 prewar).

THE INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK
DECEMBER 7, 1946

(3) Locomotive building capacity of 220 units (1,070 prewar); and freight car capacity of 4,800 (12,400 prewar)

(4) Merchant fleet (for local waters only) of 1,500,000 gross tons, with no ship over 5,000 tons. (Japan had the world's third largest merchant marine before the war, with more than 5,000,000 tons.)

•
Peacetime industries which the Japanese will be allowed to maintain and enlarge include:

Pearl culture, handicrafts, fisheries, light electrical appliances, cement and building materials, food processing, ceramics, silk culture, and mining.

•
Nervous U. S. textile manufacturers will be relieved to know that Pauley proposes drastic slashing of Japan's cotton textile capacity.

Of a peak capacity of 12,776,000 spindles and 407,000 looms, only 2,718,000 spindles and 133,000 looms now remain. These will be made the basis of the postwar industry.

•
Latin America has a better prospect of piling up U. S. tourist dollars in 1947 than any other part of the world, except Canada.

• Passports to the Hemisphere are being granted freely by Washington.

The steamship lines will have a steady flow of reconditioned passenger vessels returning to service beginning almost immediately.

The airlines, flying now with many empty seats, have announced important passenger fare reductions.

Food is plentiful in Latin America and hotels in good condition, though many are still crowded.

•
Britain, while disappointed at its inability to reap a big harvest of tourist dollars before 1948, is not seriously worried just now about dollar balances.

Shortages in the U. S. have delayed or prevented many large purchases planned in July when the loan was approved.

The British, for instance, have failed to receive 2,000,000 tons of steel ordered here.

Also, Argentina has failed to convert into gold or dollars more than a small portion of the £25,000,000 which was permitted in the Anglo-Argentine agreement.

•
British industry continues to expand overseas.

Lever Bros. and the Unilever interests have just announced that they will inaugurate immediately a \$40 million, four-year plan in British, French, and Belgian Africa.

Included are plans for a vast increase in timber, palm oil, cocoa, and rubber plantations.

•
If you are interested in advertising in Britain, you will want to see the results of that country's first advertising survey, just completed by London's National Institute of Economic Social Research.

Though based on a study of 1935 figures, it shows for the first time in what media the bulk of advertising is carried (and compares it with the U. S. record for the same year), on what commodities the largest expenditures were made, and provides the base on which future surveys will be made.

BUSINESS ABROAD

Chile Builds New Industries

Immediate plans include wide electrification, a new steel mill, farm mechanization. Long-term goals: to reduce imports, boost exports, accelerate the rise in the standard of living.

Chile's development agency—the Corporación de Fomento de la Producción—has marked the completion of its seventh year with a report on its progress and its plans.

• **Source of Funds**—It expects to have a total capital of \$184 million available for its projects in 1947. The Export-Import Bank of Washington put up \$70 million (of which \$28 million has been used); United States businessmen have provided \$2 million credit; the International Bank for Reconstruction & Development is being asked for \$40 million. The rest is Chilean money.

The corporation expects to make additional requests for financial aid from both the Eximbank and the World Bank—including at least another \$18-million in U.S. dollars from the latter for the state railways (box).

• **Goal**—The prime aim of the development corporation is to reduce dependence on foreign producers, increase home production and employment, foster exports, and accelerate the rise in the national living standard.

By 1951—at the end of the corporation's new five-year plan—production in Chile of goods previously imported, or never before exported, will effect a saving on foreign exchange of \$40 million a year.

• **Wartime Acceleration**—During the war, when the European export tap was turned off and the United States could ill afford to fill the gap, Chile was short of iron, medical supplies, coke, zinc, coal, and sacking—to name only urgent scarcities.

In this circumstance the development corporation lifted plans off its drawing boards and rushed new plants and expansions to meet national needs. Output of textiles and metallurgical, ceramic, and chemical goods was pushed. A new cement plant, a tire factory, a linen thread mill, a copper mill, and an electric motor factory were equipped and placed in operation. Most of the machinery came from the United States.

Sweeping developments in all facets of the nation's economy stud the cor-

Where the Money Goes

These are the main projects of Chile's development corporation and the amount of foreign capital involved:

Credits from U. S. Export-Import Bank

Steel mill	\$28,000,000
Hydroelectric stations	12,300,000
Agricultural machinery	10,950,000
Cement factory	4,550,000
Transport equipment	4,450,000
Copper processing ..	2,300,000
Primary materials ..	3,800,000
Petroleum	600,000
Tire factory	400,000
Textile machinery ..	450,000
Miscellaneous	2,550,000

Total \$70,350,000

Credits requested from the World Bank

State railways	\$18,000,000
Hydroelectric stations	7,500,000
Timber industry	6,000,000
Transport equipment	5,000,000
Mechanization of ports	2,000,000
Construction equipment	1,500,000

Total \$40,000,000

poration's progress report and outline of future plans:

• **Electric Power**—Installations to provide 750,000 hp. are on the drawing boards or already in process of construction. The Empresa Nacional de Electricidad has received corporation aid to the tune of \$32,500,000.

Two 6,000-hp. generators have been installed and are operating at Pilmaiquén; a third unit of similar size is being installed. At Abanico, the first two 25,000-hp. units are being mounted; a second pair is on order in the U.S. At Sauzal, a 99,000-hp. installation is reported near completion.

• **Petroleum**—Prospecting has received \$4,300,000 aid from the corporation. Exploration by geological parties has covered nearly 12,000 sq. mi. in Magallanes, Tierra del Fuego, and Punta Arenas. Certain of expanding production, the corporation plans to build a refinery with a capacity of 10,000 bbl. a day in the Santiago-Valparaíso area, and a smaller installation in Magallanes. The two refineries will cost \$350,000.

• **Farming**—Agricultural machinery imports, amounting to 4,000 units costing \$13 million, doubled Chile's farm equipment supply. The corporation plans to mechanize 1,200,000 acres in the next five years. It has created the Services of Mechanized Agricultural Teams—similar to the Russian Machine Tractor Station setup—with \$1,600,000 capital. This will comprise 106 plow teams, 26 harvesters, 20 root-clearing squads, 17



A SNAPPY MODEL FOR MOTHER INDIA?

The Kendall Gregoire (above), British version of the "Volkswagen," apparently is slated for India's multitudes, not England's. Hopes for an inexpensive, "people's car" in England have been dashed by the announcement that Grantham Productions Ltd., despite orders totaling \$4 million, has stopped production because of supply and capital troubles. Originated by W. D. Kendall, Member of Parliament, the car was to have sold for about \$800. Meanwhile, Indian businessmen, who have put \$1,200,000 into the venture, are reported ready to double their ante if Kendall withdraws from the picture. It's taken for granted that operations will eventually shift to India if that happens.

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Vertical Helical	2:1 to 80:1
Spiral Bevel	1:1 to 5:1
Planetary	4:1 to 400:1
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metral Pitch.

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tractor teams. These will cultivate and harvest 200,000 acres annually. Additional farm equipment has been ordered in the U. S. to extend the area served to 500,000 acres.

The corporation has imported thousands of head of livestock for breeding purposes.

At a cost of \$600,000, it has irrigated 200,000 acres.

Sugar beet cultivation has been started and the corporation is now seeking bids abroad for a processing plant with a daily capacity of from 600 to 1,000 tons.

• **Forestry**—The corporation has sponsored reforestation—nearly 25 million trees are in plantations and another 8-million are provided by private plantings. The country's forest wealth, the corporation estimates, will be raised during the next 15 years by about \$32-million.

Plans for the next five years, based on the work of a U. S. mission, involve four new sawmills, mechanization of lumbering, a creosote plant, a sulphite plant, a pressed-wood plant, two prefabricated house factories. This will cost \$8,000,000 in addition to imports of \$6,000,000 in U. S. equipment—funds to be supplied by the World Bank. Production will rise to \$10 million a year and 2,500 people will be employed. Instead of importing wood products valued at \$2,500,000, Chile's exports will run to \$2 million.

• **Fisheries**—Commercial fishing has increased 30% in the last six years, will double again if the corporation follows through on plans made by an American mission. Exports are planned to reach \$13 million a year.

• **Textiles**—The corporation imported a flax-spinning mill from Ireland in 1941. With capacity of 240,000 kilos in thread and yarns, it will export to Latin America.

A wool-grading and -cleaning plant was brought from the U. S. Switzerland provided equipment for a silk-thread factory with output of \$1 million a year. Britain will soon deliver a hemp-dressing plant of 2,000-ton annual capacity, valued at \$80,000.

• **Steel**—When the Compania de Acero del Pacifico mill is finished three years from now, annual production will be 150,000 tons of finished steel (180,000-ton ingot capacity). The plant will cost \$53 million and is designed for eventual expansion to 450,000-ton capacity. Previously Chile imported \$4 million of U. S. steel a year. Production of the Pacifico mill will run to \$18 million.

The mill will require 280,000 tons of iron, 150,000 tons of metallurgical coke, and 65,000 tons of flux, creating new employment and production demands in the country. The coke-furnace byproducts will include annually more than 75,000,000 cu. ft. of gas; 5,600,000 liters of benzol and light oil; 11,000



RECIPROCAL TRADE

At Beltsville, Md., a humpy young Brahman bull gets the once-over from O. E. Reed, chief of the Dept. of Agriculture's Bureau of Dairy Industry. The bureau has swapped four of its Jerseys for four Red Sindhis, one of India's most popular dairy-cattle strains, in a "mutual benefit" program to better dairy cattle in both countries. The Brahman will be crossbred with Jerseys at Jeanerette, La., to develop a domestic strain able to withstand heat and insects—long time bugaboos of southern dairymen.

tons of foundry coke; and 22,600 tons of domestic coke.

• **Nonferrous Metals**—Copper fabrication in the Manufacturera de Cobre, S.A., is now at the rate of \$3 million a year, chiefly wire and cable produced on U. S.-made equipment obtained with Eximbank credit. Production will jump to \$8 million a year next April or May when additional U. S.-built equipment adds pipes, tubes, angles, and bars to the production line. This output will replace 90% of Chile's copper import needs.

The corporation plans to build a national copper and gold smelter, a zinc refinery, and an electrolytic copper refinery—as soon as U. S. manufacturers can provide equipment. A lead refinery was opened during the war.

• **Rubber**—Chile's tire plant—La Industria Nacional de Neumaticos, S.A.—opened in 1944 with \$1 million capital, linking the development corporation (65%), General Tire & Rubber Co. (20%), and private Chilean capital (15%). Tire capacity of 70,000 a year—which last year saved imports of \$250,000—will be expanded to 100,000.

• **Other Activities**—Other industrial installations aided by the corporation include:

(1) Manufacturera de Metales, S.A., an office-furniture and equipment plant, now making stoves and dishwashers;

ALUMINUM COMPANY OF AMERICA THE PITTSBURGH PLATE GLASS COMPANY

pick **Pennsylvania**
for their 3 newest plants

1 \$6,500,000 plant at Cressona, Pennsylvania

(near Pottsville) was recently purchased from the government by Aluminum Company of America and will be used to manufacture extruded aluminum shapes, particularly for structural purposes (window screen and door frames, trimmings, moldings, railings, etc.)



2 \$1,750,000 Springdale, Pennsylvania paint plant

of the Pittsburgh Plate Glass Company will be completed shortly and will produce a complete line of paints, varnishes and enamels. This plant was located here to improve service to this highly industrialized area.

3 300 will be employed at Creighton, Pennsylvania "Twindow" plant

This new plant of the Pittsburgh Plate Glass Company will manufacture double-glazed units with high insulating properties suitable for all types of construction.

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(2) S. A. Mecanica Industrial, making nuts and bolts, water and gas pipes, and iron roofing;

(3) Cia. Industrias Metalurgicas Mecanicas Reunidas, a combine of small plants in the metals field;

(4) Siam de Tella, which added electrical motors to its line of bakery equipment, heaters, and stoves, and is licensed by Westinghouse International to manufacture irons, ventilators, and other items;

(5) Sociedad Electromat, making electrical goods in amounts that are sufficient to permit exports at an increasing rate;

(6) Corporacion de Radios de Chile, S.A., now meeting Chile's radio import needs from home production for a foreign exchange saving of \$350,000 a year;

(7) A firm making 25 double motion picture projectors a year—enough to meet local needs;

(8) Corporation-backed Chilean film producers have earned \$135,000 in foreign exchange to date. The ninth film is in production, and each feature is estimated to net the country \$90,000 to \$100,000 in much-desired foreign exchange;

(9) Quillota rayon thread plant, with a daily capacity of 300 kilograms, effecting an exchange saving of \$100,000 a year;

(10) A number of chemical and pharmaceutical plants, which the corporation has assisted in the expansion of their output;

(11) Construction and expansion of cement plants by 350,000 tons a year, doubling previous production and saving \$10 million yearly on imports of cement.

(12) The corporation has expedited imports of industrial equipment; built vast refrigerated storage facilities; is dickering for five 5,000-ton cargo ships, to cost \$3,500,000, for coastwise service; and has assisted construction of 6,000 dwellings.

• **Rivalry**—These are the primary functions of an all-powerful agency which is engaged in yanking Chile into a competitive position alongside its Latin American rivals, Argentina and Brazil. As fast as the people and the economy absorb this new production, new projects for power, industry, and agriculture will be coming off the drafting boards of the Chilean development corporation.

INDIA'S INDUSTRIAL BOOM

BOMBAY—India bared the magnitude of its industrialization efforts in figures released recently. During the period October, 1945, to July, 1946, 678 companies obtained permission to float capital issues worth about \$495,000,000.

To Pierce the "Iron Curtain"

It took the United States a year to emulate the British idea of publishing a magazine for Russians (BW—Apr. 10 '43, p. 36). Now the British have taken the initiative away from us again, this time in Poland.

This month an illustrated weekly, *Glos Anglii* (Voice of England) appeared in Warsaw. It is a twelve-page, illustrated newspaper on British life and culture. The first issue of 25,000 copies was a sell-out. It was welcomed in an exchange of messages by Foreign Secretary Bevin, and Prime Minister Osobka-Morawski. *Glos Anglii*, like its Moscow counterpart, *Britanskii Soyuznik* (British Ally), is published by the embassy press section of the British government.

Of these, 418 were industrial firms whose issues amounted to \$333,000,000. Immediate projects accounted for approximately 36% of this amount, the remainder being destined to finance long-term developments.

Only 28 industrial applications were refused. In the nonindustrial field almost 200 of the 451 applications were rejected. Textile companies headed the industrial list. They were followed in order by film companies, engineering firms, manufacturers, iron and steel makers, and mining and quarrying concerns.

SWITCH TO 60-CYCLE POWER

TORONTO—The Ontario Hydro-Electric Power Commission is preparing to change its Niagara system over from 25-cycle to 60-cycle power. The area served by this system is the most thickly populated, heavily industrialized in Canada and is the biggest power user. The rest of the country already has 60-cycle current.

In an interim report on standardization, the commission estimates the cost of conversion at \$195,000,000 over a 15-year period.

Standardization is not expected materially to increase wholesale or domestic retail rates. (The commission, publicly owned, is producer and wholesaler of power to municipally owned local power systems.) Conversion can be effected without cost to domestic, rural, or commercial power users, and with an equitable adjustment for industrial users of power.

One reason for the changeover, the report notes, is the increasing difficulty in obtaining the necessary equipment for 25-cycle power.

CANADA

Shipyards Survive

Influx of foreign orders, with more expected, means that shipbuilding will stay at a high level. France, China big buyers.

OTTAWA—Six Canadian shipyards will share a \$35,732,825 order for vessels just placed by the French government through Canadian Commercial Corp., the government's export-import business agency.

• **Good News**—The order, coupled with prospective orders from China and others already placed, indicates that shipbuilding will continue as a major industry for some time yet.

The total value of tonnage ordered by France from Canadian yards since the end of the war is now \$63,000,000. More contracts are expected to raise this total still higher.

• **Government Guarantee**—The Chinese deal was made possible by an export credit of \$12,750,000 to the Ming Sing Industrial Co. The company's commitments are guaranteed by the Chinese government. The firm will buy vessels for use on the Yangtze River. The program provides for construction in Canada of three ships 285 ft. long, six smaller vessels of 167 ft., and material and machinery for construction in China of three tugs and 40 lighters. The Chinese company also wants equipment for its present fleet.

Most of the French ships are to be delivered before the close of St. Lawrence River navigation in 1947, but five cargo vessels are scheduled for 1948 delivery. The total order is for 13 cargo vessels and 140 barges.

• **Who Is Building**—Companies receiving contracts include:

• Canadian Vickers Ltd., Montreal (four cargo vessels of 5,500 tons, each costing \$2,350,000);

• Davie Shipbuilding & Repairing Co. Ltd., Lauzon, Quebec (three 5,500-ton vessels, less engines, at \$1,725,000 each);

• Marine Industries Ltd., Sorel, Quebec (six cargo vessels of 2,600 tons, at \$1,393,000 each);

• Canadian Shipbuilding & Engineering Co., Collingwood, Ont. (15 self-propelled Hopper barges at a total price of \$6,360,000);

• Dominion Bridge Co. Ltd., Montreal (20 self-propelled Rhine barges for \$3,228,000 and 80 smaller barges for \$624,800).

• Victoria Machinery Depot Co. Ltd., Victoria, B. C. (25 self-propelled Rhine barges at \$2,587,125).

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THE Board of Directors has declared a quarterly dividend of 30 cents per share on the Common Stock of the Corporation payable on January 2, 1947 to stockholders of record at the close of business on December 16, 1946.

J. MILLER WALKER
Secretary

November 20, 1946

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THE MARKETS

(FINANCE SECTION—PAGE 92)

Security Price Averages

	This Week	Week Ago	Month Ago	Year Ago
Stocks				
Industrial	139.2	139.0	147.4	167.2
Railroad	46.0	45.8	48.8	64.8
Utility	76.0	75.2	79.9	84.5
Bonds				
Industrial	122.6	122.4	122.5	122.9
Railroad	111.7	111.7	113.1	116.9
Utility	111.9	112.0	113.9	115.9

Data: Standard & Poor's Corp.

The Market Guesses Wrong?

As the soft coal impasse moved inexorably nearer its climax on Wednesday, more and more stock market participants began to back up with "at the market" buy orders their earlier firm beliefs that the bituminous miners would soon be working again. When the gong closed Big Board trading at midweek, also, these orders had proved potent enough to cause a late tape on the upside and sharply higher prices throughout the list.

But the sentence imposed in the John L. Lewis court case (page 15) after the market had closed that day was far from what Wall Street had been expecting, judging from the earlier optimism disclosed in brokerage board rooms. Particularly upset were the many traders who had become increasingly confident Wednesday that all the delay preceding the passing of that sentence was being caused entirely by a behind-the-scenes settlement that would result in a quick resumption of mining activity.

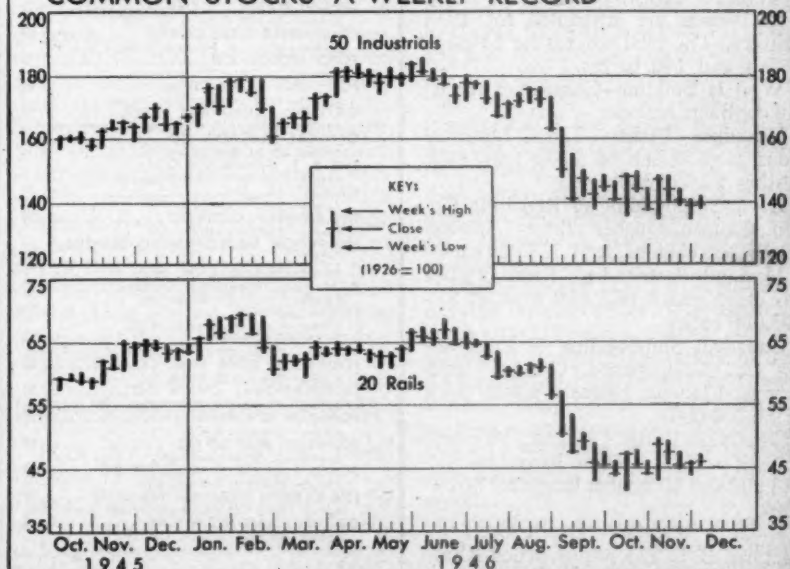
As a result, many eager purchasers of stocks while that day's New York Stock Exchange proceedings were under way left for home after the market closed much disheartened. They feared that the next few days on the stock exchange were destined to prove the occasional unreliability of the old Wall Street adage that it doesn't pay to sell stocks on strike news.

• **Out of Line?**—Normally December has been a bull month for the stock market. Only 16 times over the last 49 years, in fact, has December seen the industrial stock average move lower, and in 26 Decembers during that period the rail index has moved higher. This trend, moreover, has been particularly evidenced over the last decade. In those years the industrials moved upward on seven occasions and the rails declined only four times.

But after having its earlier fond hopes of a quick end to the soft coal tie-up dampened by Wednesday's decision, Wall Street isn't so certain that past precedents may not be broken in December, 1946.

• **Tax Selling**—Likely to make its presence felt for a time this month is a large amount of tax selling. Wall Streeters report this selling has been held up in recent weeks in the hopes that settlement of the soft coal impasse would bring about somewhat higher liquidating levels. Since 1941 the bulk of such selling has generally taken place in the first two weeks of the month. This usually has resulted in a sharp market rally during Christmas week,

COMMON STOCKS—A WEEKLY RECORD



Data: Standard & Poor's Corp.

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but at the moment the Street sees no assurance that the same general pattern will be repeated.

• **Good News Needed**—Obviously, John L. Lewis will prove the most important factor governing the movement of stock market prices until his difficulties with the government and private mine owners are cleared up one way or another. The longer the growing coal famine continues the worse the damage to the nation's economic structure will be. Needless to say, another testing of October's 1946 bear-market lows hardly seems possible to avoid if some favorable news isn't forthcoming very soon.

Much has been made lately of the market's ability in recent weeks to weather successfully four testings of its earlier bear-market low. That is a noteworthy factor that shouldn't be overlooked in considering the present overall picture. However, those bullishly inclined shouldn't totally ignore another important point. Thus far the rallies from the low have failed to carry through very far, so actually resistance on the upside has been quite as impressive recently as the resistance the market has disclosed when the old lows have been approached.

New Issues: Better—But

The stock trading arena hasn't been the only Wall Street mart to reveal rallying tendencies lately. Recent weeks have also seen the long-sluggish market for new issues (BW—Nov. 9'46, p. 74) perk up somewhat and on occasion show an ability to handle good-sized security offerings successfully.

Last week, for example, the largest preferred stock offering on record was oversubscribed; the new shares, offspring of a privately negotiated financing deal, sold at a small premium after the books had been closed. The issue was 1,000,000 shares of new General Motors Corp. \$3.75 preferred stock. They were offered at \$100 each by a selling group composed of 176 investment houses, led by Morgan, Stanley & Co.

• **Other Successes**—Successfully completed just before Thanksgiving, also, were several other pieces of large privately negotiated financing. Offerings oversubscribed then were: \$50,000,000 of 30-year 2½% Bethlehem Steel Corp. bonds, at par; 70,000 shares of Kimberly-Clark Corp. 4% preferred, at \$101.50 each; 30,000 shares of 3.85% preferred, at \$102.50; and 203,833 shares of common, at \$24.50, by James Lees & Sons, for 100 years a prominent privately owned carpet and rug manufacturer.

Appearing at about the same time was additional privately negotiated financing involving the sale of \$30,000,000 of 20-year 2½% Hiram Walker & Sons bonds at par. Also, \$14,000,000

in Safe Water Power 35-year first mortgage 3s were sold at 106.76% in a competitive bidding contest. Neither of these offerings proved to be out-the-window deals. However, reports indicate that they are not proving too hard for the underwriters to sell.

• **Something Is Missing**—December opened with a below-normal amount of undigested securities resting unsold in the hands of underwriters. Today's "float," moreover, has been causing no appreciable worry. Much of it consists of prime-grade securities; if the need arose, they could be quickly distributed by making relatively minor price concessions under the original offering prices.

But the over-all new-issues market picture still leaves much to be desired. No demand, for example, has yet sprung up for offerings of the more speculative types of securities. Expert pricing, plus fair-sized selling commissions, still appear definitely needed to insure 100% success even in offerings involving securities of the highest grades.

Besides, prices of new issues offered recently at concessions below comparable outstanding "seasoned" issues have yet to rise to the latter's levels. In other words, while the recent broader spreads (which insure higher selling commissions) have stimulated distribution of many new issues, they haven't proved equally efficient in generating any broadening of subsequent buying interest in them.

• **In Prospect**—December has never been a very active month in the security underwriting field. And there are no current signs indicating any 1946 breaking of this precedent.

Possible candidates for offering before the year-end, however, include \$25,000,000 of new Commonwealth of Australia 3½s, 1966; a Toledo Edison Co. refunding operation involving the sale of \$32,000,000 in 30-year bonds and 160,000 shares of \$100-par preferred; \$36,000,000 of Kansas City Power & Light 20-year bonds and 100,000 shares of new \$100-par preferred for refunding purposes; \$12,000,000 Pittsburgh, Bessemer & Lake Erie refunding bonds; \$13,000,000 Eastern New York Power Corp. refunding bonds; and some 400,000 shares of Gulf Oil Co. common.

Westinghouse Electric Corp. also is expected to sell soon 500,000 shares of new \$100-par preferred to finance its hefty expansion program (BW—Nov. 16'46, p. 76). Because of market conditions, however, it has postponed earlier plans for sale of some \$40,000,000 of common stock and has withdrawn those shares from SEC registration.

Many lesser-known companies which would like to sell new stock have also become discouraged lately. Withdrawals of new issues from registration, in fact, recently have been exceeding new-issue filings.



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THE TREND

DEPRESSIONS, SLUMPS, DIPS, AND BUMPS

There is much talk among economists and business analysts these days about the likelihood of a decline in business activity next year. The stock market setback of three months ago has been widely interpreted as forecasting such a development. And John Lewis has, of course, been helping it along in a big way. But most of the discussion has been so phrased that it is difficult to tell precisely what these prophets have in mind.

• They commonly lead off by saying that, of course, they do not envisage full-fledged depression, but something more moderate both in severity and in duration. So they talk of such things as a recession, or shakeout, or slump, or setback, but without stopping to provide much indication of what these things mean. Then the confusion is often confounded because the same terms are being used to mean different things.

Before we enter the lists with the business prophets, we propose to attempt a clarification and closer definition of the terms used. For that purpose, we shall call upon the facts tabulated in the box in the center of this page, in which appear the crucial dates and amounts of the declines in industrial activity in the U. S. A. during the period between the two World Wars.

A glance at the figures in the box underlines the obvious fact that there have been distinctly different types of business declines. And, while the only certainty about the economic future is uncertainty itself, there is no reason to believe that there will not continue to be different types.

• Standing in a class by itself at one extreme is the crisis that started in 1929 and saw industrial production fall off by more than one-half over a period of 44 months. There is only one name—and that well-established—for an economic reversal of this magnitude and length: “depression.” We adopt that term, with the fervent hope that our references to it will be purely historical.

From a depression it is possible to distinguish a contraction of about one-third in industrial output extending over a period of about a year, and requiring about a year and a half to regain the ground lost. Declines of this sort occurred both in 1920-1921 and again in 1937-1938. Decidedly less severe and abiding than a depression, they are still formidable. A good name for declines in this general class seems to be slump. Henceforth we shall use it.

In addition to depression and slump there have been numerous lesser declines in industrial activity. They range from one of 18% over a period of twelve months during 1923-24, from which there was a relatively quick comeback, to a decline of 12% over a period of four months in 1939-40, from which the bounce-back took only three months.

• For setbacks of these lesser magnitudes, in point of severity and depression, the term perhaps most frequently used is recession. It is a rather synthetic term which has never really become established. A more descriptive term and one that is also more economical of both word and space is “bump.” So is “dip.” Until someone suggests a better term we shall use bump or dip to tag a business reversal reflected in a decline of less than 20% in industrial activity in less than a year, and from which the recovery is measured in months. If you don't like “bump” or “dip” please suggest something better.

The history of American business movements in the past 100 years, recorded in that veritable storehouse of information, “Measuring Business Cycles,” published by the National Bureau of Economic Research, discloses almost infinite variety in the gradations of business movements. Nonetheless, it is possible to draw upon that history for further illustrations of the categories that we have here set up. For example, the only “depression” comparable to that of 1929-1933 was the equally long

and severe decline of 1873-1879. But we had several slumps like those of 1920-1921 and 1937-1938, among them those of 1893-1894 and 1907-1908. And we have traveled over a multitude of business bumps.

• Granted that almost no one anticipates the beginnings of a depression next year, and also granted that future business movements may fit none of our categories precisely, we still think that, in dealing with prospects for 1947, it is important to differentiate between a six-month 15% bump or dip and a one-year 33% slump. Such a distinction can help clear thinking in a foggy field.

We are at present busily occupied in trying to have a peek under or around the curtain that obscures our economic future, and plan to report shortly. In the meantime, we have essayed no more than an effort to clear away some of the lush growth of underbrush in the field in question by promoting clarity in the lingo used.

THE UPS AND DOWNS OF BUSINESS

Decline of	Percent Decline	Months of Decline	Months to Recover*
1920-1921	33%	14	19
1923-1924	18	14	9
1927	7	7	9
1929-1933	52	44	45
1934	13	5	4
1937-1938	33	12	17
1939-1940	12	4	3

As measured from the Federal Reserve Board Index of Industrial Production, adjusted for seasonal variation.

* To previous peak.

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